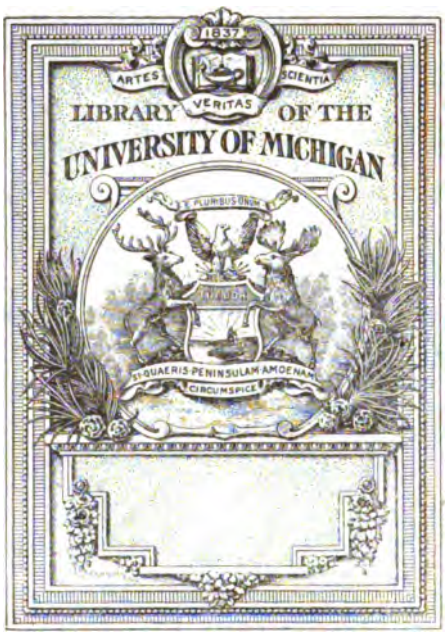

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List of Contributors.

Acheson, G., MA., M.B.
Atherton, A. B., M.D., L.R.C.P.
Atkinson, J. E., M.D.
Baldwin, J. Mark, M.A., Ph.D.
Benson, J. S., M.R.C.S. Eng.
Bingham, G. A., M.D.
Bray, John F., M.D., F.R.C.S.K.
Brown, Price, M.D.
Bucke, R. M., M.D.
Burnham, G. H., M.D., M.R.C.S. Eng.
Caven, John, B.A., M.D.
Dickson, Chas. R., M.D.
Dobie, D. A., M.D.
Duncan, J. T., M.D.
Fotheringham, J. T., B.A., M.B.
Gibson, W. J., M.D.
Graham, J. E., M.D., L.R.C.P.
Greig, W. J., M.B.
Harrington, A. J., M.D.
King, E. E., M.D., L.R.C.P. Lon.
Machell, H.T., M.D.
Macdonald, A. A., M.D.
MacFarlane, L., M.D.
Mackelcan, G.L., M.D.
Maclean, Donald, M.D.
Marcy, H. O., M.D.
Meyers, D. C., M.R.C.S. Eng.
McDonagh, G. R., M.B., L.R.C.P. Lon.
McKay, A., M.D., M.P.P.
McKenzie, B. E., B.A., M.D.
McKinnon, Angus, M.D.
McPhedran, Alex., M.B.
Mulock, W., M.A., Q.C., M.P.
Oldright, W., M.A., M.D.
Olmsted, I., M.B.
Playter, E., M.D.
Primrose, A., M.R.C.S. Eng.
Raikes, R., M.B.
Rogers, A. F., M.D.
Rosebrugh, A. F., M.D.
Ross, J. F. W., M.D., L.R.C.P. Lon.
Saunders, H.J., M.D.
Shaw, W. R., M.D.
Seibert, R.. M.D.
Teskey, L., M.D., M.R.C.S. Eng.
Tyrrel, R. Shawe, M.D., L.R.C.P. Lon.
Thorburn, J. D., M.D., F.R.C.P. & S. Edin.
Wishart, J., M.D., M.R.C.S. Eng.
Welford, A.B., M.D.
Wright, A. H., B.A., M.D.

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Original Communications.

A CASE OF HEPATIC CIRRHOSIS.*

BY J. T. FOTHERINGHAM, B.A., M.B, M.D.C.M.,
Assistant Demonstrator of Anatomy, Toronto University.

The case which I am about to detail came under my notice during a few weeks as *locum tenens* in the Toronto General Hospital, and seemed to me so unusual a form of cirrhosis due to alcoholism as to be worthy of further record.

Specimens submitted: Gross, liver, hypertrophic cirrhosis, weight 76 oz. *Microscopic*, same, hardened in alcohol and in chromic acid, stained with alum-cochineal, and some counterstained with fuchsin.

History of Case: James McK——, æt. 38, patient in Ward 6, T.G.H., care of Dr. H. C. Burritt, admitted Aug. 29th, died Sept. 4th, 1891.

1. *Family History:* Good, father and mother both healthy and of advanced age.

2. *Personal History:* Occupation, shoemaker; native of North of Ireland; no history of venereal disease or syphilis. His own accounts of his habits as regards alcohol being unsatisfactory, enquiry of the tradesman for whom he had worked for the last ten years revealed the fact that he had, until within the past year, been using alcoholic stimulants to excess; for ten years past, being drunk at least once a week, and within the past year, perhaps once a month, or on every holiday.

3. *Present Condition:* (*a*) A large well-formed man, nutrition good, appetite very fair; skin and conjunctivæ markedly icteric; very considerable ascitic distention of abdomen, not extreme, however; œdema of lower limbs, extreme at ankles, and pitting on pressure up to some inches above knees. Not so bad, he said, on admission as it had been. Jaundice was of ten months' standing, ascites and œdema of about three months'. Had been tapped in median line of abdomen some days before, and fistula had been established. House surgeon had sealed it by two fine skin sutures, one at right angles to the other, with iodoform and collodion dressing.

(*b*) *Nervous System:* Apparently normal; patient bright and talkative, and in good spirits; did not remain in bed till the last of the six days of his stay in the hospital, and then not all day. Even on the last day he was frequently up and at water closet, with strength apparently quite equal to the task.

(*c*) *Circulatory System:* No marked disturbance. Am not prepared to say that there was no hypertrophy of left heart, as *post mortem* was not allowed. No suspicion of immediate danger having been entertained, no certain account of the heart can be given. There were no valvular lesions.

(*d*) *Digestive System:* Appetite very fair; gastric digestion good; intestinal digestion impaired by lack of bile, as indicated by whitened

*Read before the Pathological Society of Toronto.

fæces, of which there was a history of ten months at least. Marked diarrhœa from use of saline and other hydragogue purgatives.

(*e*) *Urinary System:* Free diuresis from action of drugs; urine very dark-colored, containing very large quantity of bile pigment. The kidneys were found after death to be apparently normal in gross appearance, except for marked biliary staining. About the third day of his stay in hospital the scrotum and penis suddenly became very œdematous, but under increased purgation and diuresis the effusion largely disappeared in two days' time.

(*f*) *Respiratory System:* Normal; ascitic distention not enough to impede respiration much.

4. *History of Present Attack:* Patient noticed ten months before the paleness of stools and jaundice already mentioned, and for the past three months the ascites and œdema of lower extremities. Jaundice had thus preceded ascites by seven months. Was treated during all this time at the city dispensary and in private practice, with some temporary benefit at times. At the tapping already mentioned, two weeks before death, considerable fluid was removed; but no reliable data could be got as to quantity. What was oozing at the fistula spoken of was limpid, not viscid nor highly colored.

5. *Progress of Case—Treatment:*

(*a*) *Dietetic:* No fats, sugars, or alcohol were allowed; otherwise ordinary hospital fare—porridge and milk, meat, bread, rice, and vegetables. Ingestion of fluids limited so far as possible.

(*b*) *Medicinal:* Salines were given copiously, pot. tart. acida; Guy's pills were ordered four in a day, then omitted for a day; then four more and two days omitted. Not more than eight, or at most ten, were taken in all. A tonic was also given of quinine, tincture of iron, chloride of ammonia, and the bichloride of mercury. Purgation was free, twelve to fifteen liquid stools in the twenty-four hours, and diuresis marked.

On his sixth day in hospital patient seemed less bright, but was still up and about at intervals, and at 10 p.m. was sleeping rather heavily, respirations not stertorous nor rapid. About 4 a.m. the house surgeon was called, and found him in a state of coma, insensible—extremities cold, heart feeble and rapid, pupils very much contracted, respiration regular, full, slightly quickened, and forced. Expiration was marked by loud monotonous groaning phonation without opening of lips; and inspiration was short, quick, and deep, with marked muscular effort, both acts nasal; pause marked, but not long, except occasionally, when it was followed by fuller respiratory cycles.

The diuretic treatment already pursued could not be further pushed, so that warmth and stimulants seemed the only available course; hot water cans, and ether and brandy hypodermically. Death ensued in a couple of hours, apparently from a variety of toxæmia from retained excrementitious substances. The pupil and respiration were much like those of uræmia, but there were at no time any convulsive seizures.

Permission to do a *post mortem* was not obtained, but the friends seemed pleased with the suggestion that the appearance of the remains would be improved by the removal of the ascitic fluid, and a small incision for that purpose was permitted, judicious enlargement of which allowed of the removal of the liver and kidneys.

The liver weighed 76 oz., instead of 52-56 oz. It was externally of pale green color, and on section quite yellow and bile stained. It was of density to the finger almost like that of well-soaked sole leather. Enlargement was not in any place localized, but evenly distributed cirrhosis was seen, almost perfectly unilobular; scarcely any groups of more than one or two lobules being found, and the uncut surface being consequently comparatively smooth. The kidneys, as already stated, were normal but for bile staining.

Microscopic Examination: The specimens submitted will be described under the four heads of:

1. *Cirrhosis* and other change in the *stroma*.
2. *Atrophy* and other change in the *parenchyma*.
3. *Pigmentation*.
4. *Pylephlebitis* and other *vascular* change.

1. *Cirrhosis:* Very marked increase in the amount of fibrous tissue; almost absolutely unilobular. In some lobules the cirrhotic tissue can be seen throwing partitions across and shaving off portions of the lobule, much as the similar process goes on in the plugged alveoli of the lung in fibroid phthisis. In such cases the

invading fibroid tissue is markedly cellular and nucleated. Between the lobules the new tissue is in places quite old and non-nucleated; elsewhere loose and very cellular. This distinction obtains especially when the median portion of any piece of cirrhotic tissue is compared with the lateral or *juxta-lobular* portion; the former being almost pure fibrous, the latter so filled with small-cell infiltration as to almost resemble lymphomatous tissue, and to suggest an exacerbation and increased rapidity of the morbid process towards the last. Another indication of recent rapid progress is the existence in the juxta-lobular portions of the cirrhotic tissue of liver cells, quite altered by pressure to oat-seed, crescentic, and similar shapes, but still persisting. The more persistent structures of course, such as bile ducts and other vessels, are seen in the proliferated Glisson's capsule, aggregated where lobules have disappeared. In places are seen patches of cirrhotic tissue which stain badly and seem to have undergone mucoid degeneration.

2. *Atrophy* and other *parenchyma* change: The lobules are found in all stages of atrophy, down to patches where the whole of the hepatic cells have been replaced by loose fibrous tissue so thickly infiltrated with small cells as to resemble closely under the low power a recent tubercle, the cirrhotic tissue being so delicate as form only a fine fibrillar stroma. As regards the individual hepatic cells they show pressure effects, especially at the periphery of the lobule, in the change of shape already mentioned, while in the more central parts the bile capillaries and ducts can be seen to be dilated. In places can be seen a marked increase in the number of bile ducts, which are aggregated in such a manner as to show actual increase in their number, the cells, as they proliferated, taking on the modified shape peculiar to those forming the duct wall, or rather *retaining* that form and taking that arrangement.

3. *Pigmentation:* Though properly to be mentioned under the last heading, is so marked a departure from the normal as to deserve special mention. It is especially marked at the periphery of the lobules, existing both as granules in the cells and as larger masses plugging the bile capillaries and ducts.

4. *Pylephlebitis* and other *vascular* change: The radicles of the hepatic veins seem normal. The hepatic arterioles have not shared much in the changes that have occurred; but in addition to their being aggregated in spots where the parenchyma has disappeared, they at times are so dilated by obstruction at a point further on in their course as to form a kind of false angeiomatous patch. The portal venous radicles show very marked pylephlebitis. Many of them are almost occluded, the lumen being occupied in five-sixths or nine-tenths of its area by new cell-growth, leaving only a chink or Y-shaped fissure in the centre. This is apparently of endothelial origin, and in some cases the cells are, in oblique or longitudinal section, markedly elongated spindle cells of the true scar tissue type. In cross section they show round outlines, and are arranged lengthwise with the vessel-wall. Other vessels in transverse section show short spindle cells standing on end, as it were, with ends projecting into the blood stream, and presenting for contact with it a rough quasi-villous surface.

INHALATIONS.

BY D. A. DOBIE, M.D., TORONTO.

There appeared in THE CANADIAN PRACTITIONER of September 16 an article upon this subject, selected from *The New York Medical Journal*, treating of inhalations as ordinarily given by means of sprays, or with inhalers in which air is made to pass through some medicated medium before inspiration.

I quite agree with the writer that, with the first-named method, the medicinal agents "are arrested often in the pharynx, oftener in the larynx, and never reach the seat of the disease." In the second method, "though the medicated atmosphere may reach the seat of the disease, its impregnation with carbolic acid, creosote, thymol, or other such agent, is so exceedingly feeble as to leave no solid ground for anticipating serious benefit from its use." The twelve cases he mentions, reported by Prof. Germain-See, treated upon a plan similar to the last, but with compressed air instead, certainly give grounds for hope, if they are not entirely satisfactory. The writer closes with the statement that if inhalation is ever to become a valuable agent in therapeutics, it will probably be by the adoption of some analogous plan.

The plan of inhalation, I believe, that offers the most reasonable hope is by first changing the drug to the gaseous state. A number of volatile drugs, particularly creosote, which, as the etymology of the word implies, has been long known to possess flesh-preserving properties, have been, as the result of certain satisfactory experiments, recommended in the treatment of pulmonary tuberculosis; and since then this drug has been given by the stomach *ad nauseam*. In advocating the inhalation of these drugs we are met by the following questions: Can drugs be absorbed by the respiratory tract? Has the direct local application of such drugs any advantages over their remote local action? What advantages does inhalation offer over the administration of drugs by the stomach?

Physicians, as a rule, are so conservative with respect to the employment of means not ordinarily in use, and the principal channel for the administration of drugs has so long been by the stomach that we seem to forget they enter the body through other absorbing surfaces. Though every medical man must be cognizant of the fact that absorption takes place by the lungs, this medium is very little utilized.

The special function of the respiratory mucous membrane is the transference of oxygen to the blood from the air, and of carbon dioxide from the blood—in short, for the easy transfusion of gases. It is reasonable, therefore, to believe that the respiratory apparatus is, in anatomical construction, specially adapted for this function. Practically we know that many gases besides oxygen are absorbed through this channel, and produce their physiological effects more rapidly, and with less difficulty, than by any other mode of administration. Chloroform, ether, amyl-nitrite, ethyl-iodide, nitrous oxide, etc., are examples of such gases. We have other proofs of the absorption of gases in this way in the many unfortunate cases of gas poisoning, whether from manufactured illuminating gas, carbon monoxide, or sewer gas.

It follows, then, that absorption takes place by the lungs, when the drug is in the gaseous state, and it is therefore of primary importance for the successful inhalation of drugs that they be first volatilized. In the treatment of diseases affecting any particular organ, whether the application be made directly, as upon the skin, or remotely, through the blood, the effect aimed at in many cases is local.

In a case of chronic bronchitis, for example, where we administer turpentine or some similar preparation by the stomach, we expect the drug to act beneficially, through its remote local action, being excreted, in part, by the respiratory mucous membrane, stimulating, disinfecting, and liquefying its secretions. But creosote, turpentine, and many other drugs so useful in the treatment of diseases of the respiratory organs, are not only nauseous and pungent to the taste and difficult to combine with other drugs, but by their immediate local effect upon the stomach they interfere with digestion, and, therefore, with nutrition; and whatever good their excretion by by the lungs may effect is more than counterbalanced by such interference.

In such diseases as tuberculosis, where there is a struggle for existence between the bacilli and the cells of the structure they invade, we should attempt not only to destroy or retard the growth of the bacilli, but also to increase the vitality of the cells of the organism by nutrition, that they may offer a greater resistance to the progress of the disease. Since the drugs mentioned interfere with the nutrition of the patient, when given by the stomach, their administration by this channel is contra-indicated. Then, too, before entering the lungs such drugs must first pass through the liver—that wonderful chemical laboratory—and there they may undergo change.

Since, then, these drugs have a beneficial local effect upon the lungs, and such serious objections exist to their administration by the stomach, they should first be changed to gases and given by inhalation, leaving the stomach undisturbed for the digestion of such foods as will afford the best nourishment. Sprays, atomizers, or nebulizers, whether worked by compressed air or by steam, simply effect the division of the drug into minute liquid particles, which are dense, irritating, and non-diffusible, and the sensitive glottis closes against their entrance.

On the other hand, drugs in the gaseous state are light, uniform, non-irritating, and so diffusible that they are easily carried by the current of inspired air to every part of the lungs, thus coming into direct contact with their whole absorbing surface. Even if a finely divided spray reach the lungs, each drop of creosote contain-

ing about .0036 c. in., if divided into particles one-two thousand five-hundredths of an inch in diameter, would only come in contact with an absorbing surface of 9 sq. in., a very small proportion of the whole absorbing surface of the lungs.

The advantages of volatilization of the drug for inhalation over atomization is therefore apparent; and since absorption of such drugs takes place by inhalation, without interfering with nutrition, and since such interference occurs when they are given by the stomach, this method should be chosen for the administration of volatile drugs.

I have followed this practice for one year, and the results are quite up to my expectations. Among my cases I have one of tuberculosis, in which there were night sweats, much emaciation, cough, and copious expectoration. Bacilli were found in the sputa. One year ago she weighed 85 lbs., now she weighs 120 lbs. and has no evident signs of the disease. The instrument I find best adapted for this purpose is the Perfection Volatilizer.

Selections.

HEAD-NODDING AND HEAD-JERKING IN CHILDREN COMMONLY ASSOCIATED WITH NYSTAGMUS. —Hadden, in the *Lancet*, discusses twelve cases of this affection. Full notes of five cases are given. This affection is usually confused in the text-books with a special variety of epilepsy. The author does not deny the possibility of an alliance with the latter disease. The cases are characterized by nodding or lateral movements of the head, either singly or associated with one another, or with movements of rotation. These movements may be almost constant or may occur more especially during efforts at fixation, or during excitement, always ceasing during sleep and when lying down. In most cases there is nystagmus of one or both, vertical, horizontal, or rotatory, often occurring simultaneously with the onset of the head symptoms, but sometimes preceding or following them. The nystagmus is much more rapid than the head movements, and has an independent rhythm; it is aggravated by fixation or by forcibly restraining the head, and may even be induced, when previously absent, by these means.

Case 1.—Nodding of head, with occasional lateral movement; vertical nystagmus of eyeballs and eyelids; attacks of unconsciousness, with deviation of eyes; throwing back of the head an early symptom. The patient was a female, æt. 7 months. The mother gave an account of a severe fright when six months pregnant. Family history was good; mother had had no miscarriages. The patient was the sixth child, and none of them had had convulsions. Labor was normal; though healthy when born, the mother said that the child used to throw back her head and look through the half-closed eyes. The eyes began to move at the age of six weeks, and the head movements came on when the child was two months old. There was no history of injury. The general condition of the child was excellent. For ten weeks there had been a yellowish discharge from the ears. There was no rickets. During the attacks it was observed that the eyes deviated strongly to the left, and downward, the head also turning in the same direction. An examination revealed pupils active to light; ocular excursions good; convergence also good. Ophthalmoscopically, both fundi normal. The child was treated with bromide of potassium and other drugs symptomatically. There was improvement in some symptoms during the year and a quarter that she was under observation.

Case 2.—Head-jerking, chiefly from side to side; horizontal nystagmus; attacks of unconsciousness with deviation of eyes; throwing back of the head to look at objects. The patient was a male, æt. 10 months. There was no history of neurosis in the family. Three months previously he fell, striking the back of his head, but the injury was probably trivial. The child had never suffered from convulsions and was not the subject of rickets. There was horizontal nystagmus of both eyes, constant in the left, exaggerated on extreme conjugate to left side, and least of all on conjugate deviation to right. Ophthalmoscopically, the fundi were healthy. During sleep the movements of the head and eyes ceased. The child recovered fully in about six months from the beginning of treatment, and remained well as long as a year and nine months after the first visit. The treatment consisted of bromide of potassium, and later iodide of potassium.

Case 3.—Side-to-side movements of head after head injury; subsequent occurrence of nystagmus, vertical in right, horizontal in left eye; peculiar method in looking at objects; rickets; convulsions; fits of laughter. The patient was a female, æt. 8 months. She was the tenth child. Four had had convulsions. She had never had convulsions or any attacks like *petit mal*. The child fell from a chair, striking the left side of her head, but did not seem to be much hurt. The movements began five or six days later. The child was good-tempered. There was some bending of the ribs. There were no teeth. The fontanelles were open. The nystagmus persisted when the head movements stopped; vision was good; the ordinary movements of the eyeballs unimpaired and the disks normal. She had several convulsions. She finally became free from these, but the head-jerking and nystagmus persisted.

Case 4.—Vertical nystagmus of one eye only following head injury; side-to-side movements of head four months later; peculiar method of looking at objects; two relapses following falls on the head. The patient was fourteen months old. There was a history of three severe falls. The movements of the eyes were noticed a week subsequent to the last fall. There was no history of fits. No evidence of rickets was round. About a month after he came under observation he suffered one evening from convulsions, with screaming. About this time he fell on the left side of the forehead. The next day he had some nystagmus, but it only lasted about five minutes. The treatment consisted of steel wine and cod liver oil. For a month he was treated with rhubarb and soda, and salt-and-water injections for thread worms. For a time he also had bromide of potassium.

Case 5.—Lateral nystagmus following a severe head injury; recurrence after a year with occasional head movements; peculiar method of looking at objects; convulsions; mental change. The patient was a boy, æt. 14 months. The child had fallen from a high chair to the floor, striking the left side of his head against the boards. Two weeks after the fall the movements of the eyes began. The movements ceased in a day or two and the child remained well for two months. He then had some fits at night, probably convulsive. No recurrence of the nystagmus took place for a year. Six weeks later he had occasional head movements. Thirteen months after the injury all movements ceased and remained so as long as eighteen months. His disposition was changed. He became less intelligent; was forgetful and irritable. The treatment was bromide of potassium in six-grain doses.

The author next gives a detailed analysis regarding the head movements in eleven cases. In one the movements were purely nodding; in four lateral; in one a combination of lateral and rotatory; and in three a combination of nodding and shaking, or lateral movements. The muscles affected are, according to Henoch, the muscles which rotate the head as well as the sterno-mastoid. The nystagmus was rapid, four or six movements a second. It is often continuous, though aggravated by attention, by efforts at fixation, or by forcibly straining the head movements. Occasionally nystagmus will make its appearance when the head is held, though previously absent. Nystagmus is usually present in both eyes, but often one is more affected than the other. In three cases the movements were strictly uniocular.—*Weekly Medical News.*

AN UNUSUAL CASE OF APPENDICITIS.—At a recent meeting of the Society of the Alumni of Bellevue Hospital, the president, Dr. Charles Phelps, said that a little over a year ago he had been asked to see a case of appendicitis with a view to a possible operation. When they arrived at the house they had been astonished to find that the patient had suddenly passed into collapse and was absolutely pulseless. The abdomen had been so tympanitic that but little information could be obtained by examining it, and operation under these circumstances had been of course out of the question. Nevertheless, the patient had rallied, and about three months later, during the speaker's absence from the city, he had called upon Dr. Fluhrer, who had found a tumor in the region of the appendix, and had told the patient of the danger which menaced him. About three weeks ago he had returned to the speaker, and had said that he was suffering greatly from pain, which was increased by any slight indiscretion in diet. He had become greatly emaciated. A tumor had been found, but it had been situated more

in the lumbar than in the iliac region, and had appeared to be perinephritic. The speaker could not detect fluctuation, although one distinguished surgeon, who also examined the case, had been positive that he detected it. Operation had been advised, and about a week later, when it was about to be performed, no tumor could be found, although there was still considerable tenderness in the right iliac region. The man's general condition had seemed to indicate so clearly the existence of some pus formation that the lumbar incision had been made, and the region of the cæcum explored with the finger. No trace of inflammation could be found, so the wound had been drained. On dressing the wound three days later, the drainage tube had been found to be filled with extremely thick, fœtid pus. There had evidently been a collection of pus deep down in the cæcal region. Two days after this he had said that he had felt a passage of gas through the tube under the dressings, and two days after this, after an enema of about a quart of soap and water, a considerable quantity of this had come through the drainage-tube. The speaker had advised the administration of another injection containing some coloring matter, but, before this could be done, some fæcal matter had escaped through the wound, thus proving the existence of a perforation. During the past ten days there had been no discharge of fæcal matter, and the pus was quite scanty. The drainage-tube had not been disturbed, the bowels were moving regularly, there was no elevation of temperature, and the patient's general condition was rapidly improving. The perforation must have occurred at the time of the collapse, but the general peritoneal cavity had escaped. The peculiar features connected with the tumor might be explained on the supposition that in consequence of the local irritation there might have been sufficient œdema of the cellular tissue to lead to the error regarding the existence of fluctuation.—*N. Y. Med. Jour.*

OPIUM ENEMATA IN THREATENED ABORTION. —In the *Gazeta Lekarska*, No. 33, 1891, p. 657, Dr. Feliks Arnstein, of Kutno, Russian Poland, maintains that in cases of threatened abortion the practitioner is justified in accelerating and terminating the process only when the interruption of gestation is induced by death of the fœtus. "In all other cases," he says, "be the uterine pains of short or long standing, weak or strong; be flooding absent or present, scanty or profuse; be the cervix softened or not, and the os closed or widely gaping—in all alike treatment must consist in adopting all possible measures for retaining the ovum in the womb and arresting its threatened expulsion therefrom." As far as the writer's personal experience goes, the best way to accomplish this is the persevering administration of opium per rectum. As much as fifteen drops of simple tincture of opium, *Ph. Ross.* (containing one in ten of the drug), with two tablespoonfuls of lukewarm water, should be injected into the bowel every hour, the patient lying quietly in bed and taking occasionally some acid drink. Leaving out of consideration cases in which complete detachment of the ovum has already taken place, the treatment is said to be followed by the best possible results: "the uterine pains steadily and fairly quickly become less intense and less frequent, and ultimately cease altogether; hemorrhage becomes less and disappears; in some (occasionally twenty) hours the os is found to have contracted and the ovum to have receded." The author relates a case in which a fairly advanced abortion was controlled by the injection of 45 drops of the opium tincture. In some cases, however, the total quantity required for the purpose may amount to 80 or even 100 drops. Pregnant women are thought to tolerate opium much better than other persons, the toxic effects being usually limited to a heavy feeling about the head and drowsiness, which disappear in a day or so.—*British Medical Journal.*

ON THE LOCAL TREATMENT OF STRANGULATED HERNIA BY ETHER. — Dr. Finkelstein gave in 1882, from his own practice, 63 cases of strangulated hernia. Of these, five yielded to taxis. In 58 he employed "local etherization," taxis having failed, and of these 58 cases 54 proved successful. Of the four unsuccessful cases two underwent surgical operations and two died refusing operative treatment. The method is simplicity itself. The patient is placed on his back, with the hips slightly raised and legs flexed, and then every ten minutes or a quarter of an

hour a tablespoonful of sulphuric ether is poured on the hernia-ring and tumor. The application of ether is carried on for, as a rule, from three-quarters to three hours (or even four hours) until the tense tumor relaxes and lessens a little. As soon as this occurs, and if the strangulated bowel does not reduce itself, several slight efforts are made to reduce it, and almost "always" it slips with a gurgle and amazing ease into the belly cavity. If the omentum alone be strangulated, the ether method is absolutely useless. As the ether causes an after feeling of heat and burning on the penis, labia, etc., Dr. Koch (America) protects these and other sensitive parts by previously smearing them with olive oil, and, in addition, covering them with pledgets of cotton wadding. The ether seems to act thus. Richter, Velpeau, and others, hold that strangulation may in some cases be caused by spasm of the abdominal orifice. In these cases the ether may act by relaxing the spasm and thus reducing the bowel movable. That may be so, our author remarks, but he himself lays most stress on the property ether has of producing intense cold by rapid evaporation. The intense cold condenses the gas in the bowel, and by so doing diminishes its calibre. Possibly, also, the cold stimulates the peripheric nerves in the bowel sheath, and excites it to natural peristaltic action, which is more likely to empty it of gas, fluid and semifluid contents than the rude manipulations in taxis.—*Medical and Surgical Reporter.*

ARISTOL IN CANCER OF THE UTERINE CERVIX.—E. Arcoleo reports (*Rif. Med.*, October 10th, 1891) the results obtained by him with aristol in cases of cancer of the cervix. In the first case the disease had existed for about a year, and the patient complained of constant lancinating pain in the hypogastric region and loins, which hypodermic injections of morphine only slightly relieved; hemorrhage was frequent and abundant, and there was a copious, foul-smelling, ichorous discharge. The cervix was completely adherent, the anterior lip being entirely replaced by an ulcerated growth, which also involved one-half of the posterior lip. The curette and the thermo-cautery had been freely used without appreciably checking the progress of the disease. Aristol was insufflated through a speculum, a small pledget of cotton-wool being afterwards left in the vagina. After the very first application the patient felt so much relieved that she was able to sleep at night, which the pain had previously prevented her from doing. A few days later the hemorrage, which was rapidly exhausting her, ceased, and at the date of the report, forty days afterwards, it had not come on again. The discharge was also very markedly decreased and the general health improved. On examination after six weeks' treatment, it was seen that the limits of the malignant ulceration had not extended in the slightest degree; the ulcerated surface was shallower and in every way healthier looking. In several other cases the effects of insufflations of aristol were equally satisfactory. Arcoleo sums up its action as follows: (1) It relieves pain to a remarkable degree; (2) it stops bleeding; (3) it lessens the amount of discharge; and (4) it makes the latter comparatively inoffensive. The action of the drug is purely local; it is not absorbed, and therefore no toxic effects need be apprehended.—*British Medical Journal.*

BISMUTH SUBNITRATE AS A DRESSING FOR THE UMBILICAL CORD.—For several years I have used bismuth subnitrate as a dressing for the umbilical cord in the newborn. The method of application is as follows: Cut a piece of lint sufficiently large to fold over and prevent the bismuth from being dispersed. Through this a hole is made small enough to fit tightly about the cord and prevent dispersion at that point. The abdomen about the cord is dusted with the bismuth, the cord is passed through the hole in the lint, and the lint pushed well down upon the abdomen. Bismuth enough to completely bury the cord is applied, the lint is folded over smoothly, and the binder applied. The advantages I claim for this mode over all others are the following: (1) Convenience. It has to be applied only once, as the cord immediately dries up, and does not need to be disturbed until it has dropped off. (2) Cleanliness. There is absolutely no odor, and the addition, at the time of the bath, of a little bismuth to places showing evidences of moisture will keep everything dry and sweet. (3) Safety. Mothers and nurses are not meddling with the dressing, since everything goes on so satisfactorily. There is left no

sloughing, discharging stump to corrode the surrounding tissues and bring on hemorrhage or predispose to hernia. (4) The cord drops off sooner than by any other method. For small cords, three days; for large ones, five—rarely exceeding six—constitute the usual time. (5) A better and firmer cicatrix is left than by any other method known to me. Since I have been using the bismuth dressing I have had no accidents, and 100 per cent. of good results. Much depends upon the manner of dressing, and I have, therefore, somewhat minutely described its application.—George A. Stuart, M.D., of Wahu, China, in *Medical News*.

OXALURIA AND HÆMATURIA.—Of the clinical significance of the excretion of oxalate of lime in the urine, in the condition described as oxaluria, very little is known. Numerous cases of so-called cyclical albuminuria, accompanied by oxaluria, have been described in *The Lancet*, in which by some authors the albumen was ascribed to irritation of the kidneys by the crystals of oxalate of lime. That some of the albumen in those conditions is derived from the urinary tract is highly probable, but the following case seems to support the view that the excretion of crystals of oxalate of lime does irritate the kidneys in some cases.

Mrs. M——, a young woman of very rheumatic history, was taken ill during the night of July 20th with severe pain in the lumbar region. She likewise had headache and felt very feverish. Next morning the pain was easier, though the headache was still present, and she noticed that her urine had become of a bright-red color. There was no pain on micturition. I saw her on the following day; she was then complaining of headache. Pain in the back still present; no œdema. First sound of heart loud and accentuated. Pulse 100, full, and of rather high tension. Urine faintly acid, containing blood in large quantities and albumen. Under the microscope the deposit was seen to be composed of blood-corpuscles, crystals of oxalate of lime, and numerous tube casts containing epithelial and blood cells, oxalate as well as crystals. On inquiry I found that for three days before the attack the patient had been partaking largely of rhubarb, which she said she knew never suited her. She was directed to take nothing but milk, to rest in bed, to keep the bowels freely open with Friedrichshall water, and nitro-hydrochloric acid was prescribed. On the following day there was marked improvement. The pain in the back was gone, the blood and casts were decidedly diminished, and urine was passed in larger quantity than formerly. The oxalates were still present. By July 26th the blood, albumen, and casts had entirely disappeared, and the patient was feeling quite well.

In the *Monthly Journal* for August, 1849, Begbie describes certain cases of what he terms the oxaluric diathesis, but in none of his cases, though there was pain in the back, does there seem to have been kidney irritation produced. The passage of the oxalates in the case above quoted differs from his, in that the oxalic acid seems to have been absorbed directly from the stomach, and not to have been produced during the process of digestion and assimilation. That there was in this case a true nephritis I think there can be no doubt from the presence of the casts, and the oxalate of lime crystals seem to be the cause, and not a mere concomitant.—Francis D. Boyd, M.B., M.R.C.P., in *The Lancet*.

SYPHILITIC INFECTION THROUGH SHAVING (*Allg. Med. Centralbtt.*, 1890, 8).—In the *Berliner Dermatologischen Vereinigung*, Herr Oestreicher describes the case of a patient who contracted syphilis through a scratch he received in shaving. On the patient, a man about thirty years of age, a papulo-squamous rash was found, which, in addition to very pronounced polyadenitis, mucous patches on the soft palate, falling off of the hair, led to the diagnosis of syphilis. The patient did not remember even having had a sore on the genitals. In agreement with this, no scar could be found as the remains of a primary sore. After prolonged search, the author found on the left cheek, at the edge of the beard, a solitary scar-like thickening, which looked like a healed hard chancre; on this side of the head also the submaxillary glands were found much swollen. The patient remembered having been cut by the barber shaving him some weeks before, but could give no account of the further course of the disease.—*Medicinisch Chirurgische Rundschau*, May 15, 1891.—G.A.F.

A NEW INDUSTRY.—To mention Upsal is to the majority of readers to recall Swedenborg to memory. But to the scientist, Upsal will ever be dear as the scene of Charles William Scheele's labors—labors great and numerous, any one of which would have shed lustre on his name, and all of which were completed prior to his premature death at forty-four years of age. One of the last of his works was the discovery and isolation of the sweet principle of oils and fats—glycerine—at first a mere chemical curiosity in the little laboratory of that far-off Norse town duly labelled and described by one who wore out his life in questioning Nature. But with what a result! How many thousands now enjoy wealth, and how many factories now raise their tall chimneys as monuments to the silent questioner, let one, and that one the least of his mighty works tell. The *Chemist and Druggist* informs us that the output of glycerine is 40,000 tons per annum. But this of itself is really nothing to the secondary results of the great chemist's discovery. He bestowed on the world cheap and good candle-light, and enabled manufacturers to produce a soap better and less expensive than was before known. Mining operations are rendered more easy by the glycerine compounds; smokeless powder makes a demand on it, and its use in pharmacy is daily becoming more essential. To write a list of the preparations into which glycerine enters, and of the method of its preparation, would be to give a summary of the majority of the domestic and scientific products that distinguish the cilvilization of the present from that of the past century.—*Med. Press and Cir.*

EXPERIMENTS IN GUNSHOT WOUNDS.—The army surgeons who have been attending the course of operations under the direction of Professor Kocher, of Berne, have just been studying at Thoune the destructive powers of the new Swiss rifle. In their presence have been practised several series of rifle shots, at ranges of from 60 to 600 metres, with bullets proportionately varying in velocity. Among the objects fired at were materials of various kinds, including osseous structures and pieces of wood filled with liquid, in order to take note, by way of analogy, of the effects of the bullet on the living subject. These experiments have amply confirmed what has long been practically admitted, that at high velocities the bullet discharged from small-bore firearms produces effects analogous to those of an explosive projectile.—*London Lancet.*

THE
Canadian Practitioner
A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, JANUARY 1, 1892.

THE ELECTION PROTEST FOR THE BURLINGTON AND HOME DIVISION.

It will be remembered that at the last general election for the Ontario Medical Council, Dr. George Shaw was declared duly elected, and acted as the representative for the Burlington and Home Division for one session. A protest was entered, and the matter came before the Committee on Credentials, who were thus called upon to act in a judicial capacity. After a consideration of various questions which were raised, it was found that the members of the committee were unable to agree, and, as a consequence, a majority and a minority report were submitted, the result being that the report of the majority was accepted and Dr. Shaw was unseated.

We publish in this issue a letter from Dr. Shaw on the subject. We do not propose at this time to discuss the details of the points at issue. From what we could learn at the time the decision was reached, we were inclined to think that Dr. Shaw was rather harshly treated. From what we have heard since the meeting of the council, we believe there is a pretty general consensus of opinion among those who have carefully considered the matter that the minority report was the one which, in justice, should have been accepted by the council. The Committee

on Credentials may be a very good one in a way, but as a court of appeal—perhaps the less said about it the better.

DR. CANNIFF'S NEW WORK: "THE MEDICAL PROFESSION IN UPPER CANADA."

We are glad to learn that this work will shortly be published. We understand it will be illustrated by a considerable number of portraits of physicians, among whom are Drs. Widmer, Rolph, and Workman. There will also be a picture of the first medical school building in Upper Canada, erected for the medical department of King's College. We quote as follows from Mr. G. Mercer Adam's expressed opinion of the work:

"The historical narrative-treating of the medical men in Upper Canada from the foundation of the Province, which Dr. William Canniff, of Toronto, is now passing through the press, ought to be hailed with satisfaction, if not with delight. The beginnings of the professions in Upper Canada necessarily introduce to us many of the men who were the makers of the Province. Of these, the physicians and army surgeons who settled in Upper Canada after the Revolutionary War form no inconsiderable portion of that element in the community which gave substance to the national fabric and contributed to its integrity and stability. It adds no little to present-day interest in these early medical practitioners to know that not a few of them were U. E. Loyalists, and identified with the cause which led many of the then inhabitants of the Province to sacrifice their all for the sake of living under the grand old Red Cross banner of Britain. Coming from the pen of so devoted a student of Canadian history and enthusiastic member of the medical profession as Dr. Canniff, the subscription list should be eagerly filled, and the work thereby hastened in its appearance. A youthful community like Canada owes too much, in many ways, to its medical men of a past generation to be indifferent to their fame or heedless to their memory."

We regret that we have not space for the list of physicians to whom reference is made in the work, but it includes all the prominent doctors of the past and many of the present generation.

DANGERS OF TURKISH BATHS.

Two deaths which have recently occurred in Turkish bathing establishments in New York city have impelled *The Medical News* to give a word of caution on the subject. In one case a young man died in convulsions in the hot room; in the other the bather died suddenly after coming from the plunge bath. There appears to be no certainty as to the exact cause of death in either instance; but the results are not a great surprise to those who have any knowledge of the workings of such institutions in recent years.

Such baths are undoubtedly useful from a hygienic and therapeutic point of view, but are quite unsuitable for many, and postively dangerous for a few. *The News* well expresses the position in saying: "There can be little doubt that in certain forms of cardiac, arterial, and cerebral disease, the bather should act upon the advice of his physician, and there can also be little doubt that every bathing establishment should see that supervision and guidance are exercised over the bathers. The pulse rate is immensely quickened in the hot air, and a too protracted stay has probably in many cases proved injurious."

PAN-AMERICAN MEDICAL CONGRESS.

The arrangements for the meeting of the congress in '93 are being rapidly pushed. For a time it was expected that the preliminary publications would be printed in English and Spanish only. It has been decided, however, by the executive committee, to use the Portuguese also, out of consideration for the large number of distinguished physicians in South America who speak this tongue, and have promised their cordial support towards the success of the undertaking.

Meeting of Medical Societies.

TORONTO MEDICAL SOCIETY.

November 18th, 1891.

The president, Dr. A. A. Macdonald, in the chair.

Dr. A. H. Wright read a paper on

THE TREATMENT OF PLACENTA PRÆVIA.

As a rule the first symptom which calls our attention is a hemorrhage, coming on suddenly without any known cause. Not infrequently there has been comparatively little bleeding, which may have ceased entirely before the physician has seen the patient. Under such circumstances there is a great temptation to temporize. We should ever bear in mind that the life of a woman with placenta prævia is in constant danger until the uterus is emptied. Whether the placenta just reaches the internal os,

or covers it, there exists the grave danger of a hemorrhage which may cause death before the doctor can reach the bedside. The safest procedure for the mother is, therefore, the immediate induction of labor. There is, however, a serious objection to such an action when the fœtus is alive, but not viable. While I would not sacrifice the life of a mother for such a consideration, I would be willing to assume certain risks in the interests of the unborn babe. I would say in a general way: Keep your patient quiet; if possible, have with her a trained nurse capable of acting promptly in case of alarming hemorrhage; as to yourself, keep as close as possible to the handle of your patient's front door, armed with your best-filled obstetric satchel. When the fœtus is dead our rule should be to induce labor at once.

When pregnancy has advanced to the end of the seventh month, we have to consider the safety of both mother and child—the welfare of the mother being the more important consideration with most of us. Fortunately, in the majority of cases the induction of premature labor is safer for both mother and babe. At this stage the child is viable, and under a policy of non-interference its chances in utero are somewhat precarious. The partial detachments of the placenta, which are apt to occur, and which cause the hemorrhages, tend to produce asphyxia in the child. If, on the contrary, no hemorrhages occur up to the time of labor, and only slight ones then, the mother is comparatively safe, and the newborn babe is likely to be strong and vigorous. Such happy but exceptional histories should not influence us in the direction of a do-nothing policy, or what is called the expectant plan of treatment. Under such circumstances it is decidedly better for the mother, and certainly as well if not better for the child, that premature labor should be induced.

Barnes' hydrostatic dilators are considered by the majority of authors the best means of dilating the cervix and producing labor pains. I am not a great admirer of these dilators. Rubber is a most unreliable material in this changeable climate of ours. After having kept the bags for a few months, we are apt to find them utterly useless when we want them. They are not easy to use in all cases, as they are prone to slip in too far, or suddenly pop out of the cervical canal as we are filling them. In injecting them with water it is hard to know when they are properly filled. If we inject too little they are not of much use, and if we inject too much they may burst. However, they are sometimes very useful, and it is well to have them at hand.

There is another dilator, somewhat old-fashioned, in disgrace in certain quarters, viz., the clean finger-tip, or a combination of two or three fingers. Put intelligent eyes into your finger ends, proceed cautiously and carefully in stretching the cervical canal with them, and you can frequently, if not generally, do good work. In a large proportion of these cases the cervix is soft and easily dilatable and, under such conditions a judicious use of the fingers can accomplish much. The finger dilation may, however, do much harm if accompanied by undue force, in consequence of the development of large blood vessels in the cervical region through the faulty position of the placenta.

Another method, rather old, and vigorously condemned by some of our ablest obstetrical authorities, is the vaginal tampon. Braxton Hicks, in the discussion on placenta prævia at the British Medical Association, August, 1889, speaking of the stoppage of hemorrhage, says: "With regard to the pressure by the tampon, I believe that the general consensus in British midwifery is against its use, and with this I am in accord—partly because, unless perfectly done, and this is difficult, it is of no use; and if perfectly done, it is very distressing to the patient, especially if it be necessary, which it often is, to renew it to avoid septic generation. Still it has some advantages, because, by distending the roof of the vagina, we also dilate the os, and provoke uterine action. But its action is tedious, and lacks the precision afforded us by the more recent methods." On the other hand, so high an authority as Dr. More Madden stated that after trying various plans he had found nothing superior to the tampon, "the introduction of which is followed by labor, and then effecting delivery by version."

In considering so vital a question as the treatment of placenta prævia, I am anxious to choose a method not only efficient, but always available. Barnes' bags are excellent things in their way, but very unreliable. Any practitioner, though he own a dozen of them, may be caught in an emergency when the bags are not at hand. The materials for a plug are always easy to get. You can get clean cotton, hot water, and soap in any house. You will probably have some antiseptic with you; if not, your soap and hot water will clean the fingers, with the aid of a penknife, and your hot water will render aseptic anything like ordinarily clean cotton. If you are attending a case of placenta prævia, with a dead fœtus or viable child, where there is hemorrhage with an undilated os, your aim should be to stop the hemorrhage and at the same time dilate the os and bring on labor as soon as possible, and for that purpose I contend that one of the most easily available and most efficacious procedures is the introduction of a vaginal tampon. Dr. Hicks thinks that unless it is perfectly done it is of no use. Certainly! I agree with him, but it ought to be perfectly done. He also objects because it is very distressing to the patient "if perfectly done." My opinion is that if it is perfectly done it is not, as a rule, very distressing. Dr. Hicks admits that it has some advantages in distending the roof of the vagina and thus dilating the os and provoking uterine contractions.

This leads to the question: What may we expect from the tampon? (1) It helps to prevent hemorrhage in two ways; first, by direct pressure; second, by irritating the nerve ganglia in the upper portion of vagina and thereby causing uterine contractions. These uterine contractions tend to close the bleeding vessels by the direct pressure, and also by forcing the fœtus against them. (2) It helps to dilate the os in the majority of cases. (3) It excites the uterine contractions, and thus, together with the dilatation of the os, precipitates labor.

For material I prefer old soft cotton torn into strips not more than an inch and a half wide. I generally have these strips stitched together so as to have one continuous piece, which is very easy to remove. I saw this plan carried out by the late Dr. Taylor, of New York, about twenty years ago, and I have seen no improvement on it since, excepting the additional antiseptic precautions. Dr. Taylor used the cotton in the form of an ordinary

roller bandage, but I prefer to leave it loose in a basin of bichloride solution, 1-5000, and draw it from the antiseptic solution as I place it in the vagina. Iodoform gauze torn into strips in the same way answers admirably for the same purpose. Although not absolutely necessary, it is a great convenience to have a Sims' speculum. It is very important to pack the upper part of the vagina carefully and systematically, first surrounding the cervix and then putting the cotton within the os if possible. It is not well to distend the vulva very much because it causes great pain, and it is not necessary, as pads carefully placed over the vulva, and properly retained there, will exert all the pressure needed.

During the progress of labor, while the os is dilating, the great danger is from hemorrhage. If we can manage to control the hemorrhage, as a general rule we have nothing else to do. Formerly it was considered all-important to complete the delivery as soon as possible, and hence arose the procedure known as "accouchement forcé," which is now so generally condemned. In the early stage, when there is only slight dilatation of the os, I would rely chiefly upon the tampon introduced into the vagina in the manner indicated. After the os is dilated so that the fingers can be introduced we should still check hemorrhage, and the best way to accomplish that is to cause pressure on the bleeding vessels by means of the fœtus.

I have never seen a case in which the placenta could not be pushed to one side of the internal os. As soon as one or two fingers can be passed this should be done and the membranes ruptured; then try to bring the head or breech of the child against the placenta. In some cases the forceps may be applied to the presenting head, which may then be brought down until it presses on placenta. Here it may be left, especially if the cervix is not fully dilated, and the labor finished in the normal way.

It occasionally happens in central placenta prævia that the edge of the placenta cannot be reached, even when the finger is introduced within the os and swept in every direction, separating the placenta from uterine tissue; and in such cases it is sometimes necessary to push the finger through the placental mass before the membranes can be ruptured, or the manipulations of the fœtus can be accomplished.

In the great majority of cases there is a definite line of treatment which should be adopted after the os is wholly or partially dilated, *i.e.*, the treatment recommended by Dr. Braxton Hicks: turn by the combined or bimanual method and pull down the leg until the breech presses against the placental vessels. As soon as the hemorrhage ceases, stop pulling on the leg and leave the case to nature. If bleeding recurs, pull again on the leg until the breech is brought against the placenta with sufficient force to act as an efficient tampon. Turning by Hick's method can frequently be performed when the os is sufficiently dilated to allow only one finger to pass through it.

I would summarize as follows:

(1) If hemorrhage occurs before child is viable, wait and watch carefully, unless the bleeding is copious.

(2) In all cases where the child is dead or, being alive, is viable, induce premature labor at once.

(3) In doing this use first the vaginal tampon, and complete the dilatation of the os with the fingers or Barnes' dilators.

(4) When the os is wholly or partially dilated, try to bring the head or breech in a position to act as a tampon on the bleeding vessels.

(5) In the majority of cases rupture the membranes, turn by the combined method, and pull the leg until the breech acts as a plug; then leave the case to nature, unless a necessity for interference arises.

Dr. Britton had seen four cases, of which two had been fatal. One is very apt to overlook slight hemorrhages as due to tears of small cervical vessels; but when sudden severe, perhaps fatal, hemorrhage sets in, the true cause of the trouble becomes apparent. His first case was a multipara. Os was partly dilated; some slight hemorrhage. Suddenly severe hemorrhage set in; os was dilated and a marginal placenta prævia found. Delivery was effected with forceps. Half an hour after delivery fatal post-partum hemorrhage occurred. Had the slight initial hemorrhage led to a careful vaginal examination, the fatal result might possibly have been averted.

In another case a placenta prævia was found partly covering the os; the placenta was separated at one side, membranes ruptured and version done. In this case also there was violent post-partum hemorrhage. The inside of the uterus was swabbed out with cotton soaked in tinct. ferri mur. Violent tonic contraction ensued and the case went on to recovery.

Slow delivery is not always safe. In a case of placenta prævia where hemorrhage had been so severe that sighing and complaint of constriction around the chest were marked symptoms, the os was dilated with the fingers and version done. In spite of the feet and the hips being brought down and left, very severe bleeding kept up, probably from laceration of some large cervical vessel during dilatation. In such a case speedy delivery is certainly indicated. Shortly after delivery profuse post-partum hemorrhage occurred, although it had been anticipated and every precaution observed. This bleeding lasted for an hour; seven hours afterwards death occurred from a convulsion.

Astringents might be of some use. In a multipara with central placenta prævia, the os was found to admit two fingers. The finger was swept around and then warm liq. ferri persulph., 1 in 5, injected, controlling the bleeding. This process was repeated until the edge of the placenta was reached, when delivery was effected by version.

Post-partum hemorrhage is frequent in placenta prævia because of the weakening of the patient by previous loss of blood, and because from the abnormal position of the placenta there is but little uterine tissue to contract around it, and so check hemorrhage. If the fœtus is dead the placenta is contracted; there is less circulation in the part and less danger of hemorrhage. The tampon he had used but once for placenta prævia. Hemorrhage may occur in spite of the tampon if the uterine contraction be not very strong.

In the way of prevention something might be done. Most cases occur in multiparæ who have chronic endometritis. Naturally, no doubt, the ovum adheres to the first convenient place. Owing to the endometritis, the ovum falls lower down because the normal preparation for the ovum by hy-

pertrophy of the mucous membrane has not been so complete. Uterine tumors, by altering the shape of the uterus, predispose to placenta prævia. It should be a rule of practice to examine the uterus a month or six weeks after placenta prævia, in order to find the cause of the condition.

Dr. Powell had seen three cases successfully treated by means of the vaginal tampon.

Dr. Cameron had seen but one case, and in it Barnes' method followed by version had been used. Forceps were needed to deliver the after-coming head. The placenta was adherent and had to be stripped off piecemeal. Post-partum hemorrhage followed and was successfully dealt with. Carbolic acid injections were ordered, but the nurse injected the fluid into the rectum and carbolic acid poisoning followed. The solution of bichloride proposed was too strong, for the vaginal mucosa may be irritated by even 1 in 5000. Creolin or carbolic acid are better.

Dr. Machell thought that too much stress could not be laid on the fact that if the child was viable, and there was any hemorrhage, interference should be immediate.

Pathology.

THE DISSEMINATION OF TUBERCULOSIS BY PASSENGER TRAFFIC ON RAILWAYS (Prausnitz, *Central. für Bakt. u. Parasit.*, Sept. 18, 1891).—Incited thereto by Cornet's investigations, Prausnitz investigated the dust taken from passenger trains for the bacillus tuberculosis. He chose for his experiments through-going cars, which were most used by consumptives. After the arrival of the train from Berlin in Munich, he swept up the dust collected underneath the compartment carpets of the selected cars and mixed it up in a sterilized porcelain capsule, mixed a part of it in sterilized distilled water, and injected it into the peritoneal cavity of guinea-pigs. In this way twenty guinea-pigs were injected with the dust taken from ten compartments of four cars on five days. Of these twenty guinea-pigs, five developed tuberculosis. The dust used in these five cases all came from two cars. The experiments showed that the dust of railway cars, in which one would presume that large numbers of tubercle bacilli might be present, for the most part contains none of these germs, and even in the cars which are longest on the road the dust contains but few. "The ordinary method of cleaning out railway passenger cars suffices to keep them so free of tubercle germs that danger to the travelling public in this respect seems to be excluded." —J.C.

SUPPURATION COMPLICATING TYPHOID FEVER (*Centralb. für Bakt. u. Parasit.*, Nov. 7, 1891).—Dèstrée made bacteriological investigations in the case of a number of patients ill of enteric fever, in the clinic of Prof. Stienou, and with the following results: In four cases of abscess in different locations (viz., right and left mammæ, left axilla, region of sacrum), only the staphylococcus pyogenus aureus could be found. In a fifth case, in which there appeared a left-sided acute purulent ostitis in the convalescence stage, Eberth's bacillus alone was discovered. The investigator concludes that whilst the typhoid germ *may* excite suppuration, in most cases the ordinary *pyogenic* forms are the cause.—J.C.

Correspondence.

Editor of THE CANADIAN PRACTITIONER:

SIR,—With your permission I desire to point out an apparent defect in the Ontario Medical Act which should be remedied before the next elections in 1895, and in doing so I shall refer to the recent Burlington and Home protested election, which was decided at the last session of the Medical Council, and to which you referred in your issue of July 1st. It will be remembered that I was elected, and that my opponent, Dr. Miller, entered a protest, with the result that the Committee on Credentials gave him the seat by a majority of two. In doing so they allowed Dr. Cattermole's vote for my opponent and disallowed the votes of Drs. O'Reilly, Ranney, Robinson, and Lafferty (the returning officer), who had voted for me. Firm in the belief that I did not receive justice at the hands of the committee, I submitted all the facts in connection with the protest to Mr. A. B. Aylesworth, Q.C., Toronto, with the view of appealing from the decision of the council.

Re the vote of Dr. Lafferty, Mr. Aylesworth says: "In the absence of any legislation depriving the returning officer of his vote at an election for member to the council, I can see no reason why such returning officer (if otherwise qualified to vote at any such election) could not validly cast his ballot with precisely the same right as any other elector. I think, therefore, that, unless there is some legislation in the council by-laws declaring that the returning officer is

not entitled to vote at the election in his division, he is so entitled, and his ballot ought to be counted."

Mr. Aylesworth again says: "As to the votes of Drs. O'Reilly and Ranney, I do not see how there can be any question, if they were at the time duly registered practitioners."

I might add that after the council adjourned, Drs. Bray, Campbell, and myself met Mr. W. R. Meredith, Q.C., and Dr. Bray, who was a member of the Committee on Credentials, stated to him the case of the returning officer's vote, and Mr. Meredith took precisely the same view as given above by Mr. Aylesworth. I might say further that the returning officer had written instructions from Dr. Pyne that it was proper for him to cast his ballot; also that returning officers had voted at such elections in the past, and that the returning officer's vote had been allowed by the council in a former protested election case, which facts were known to the committee when they disallowed the returning officer's vote cast for me. So far the opinion of my counsel is quite satisfactory, because, without going further, it would give me the seat. But now comes the disappointment, for again Mr. Aylesworth says: "Section 10 of the statute provides for the case of disputed elections, empowering the council to hold an enquiry and decide who is the legally elected member; and the section goes on to declare that the person whom they decide to have been elected shall be, and be deemed to be, the member duly elected, and the question is whether, in view of this enactment, there is any other remedy open to a dissatisfied candidate than this section provides. . . . The general rule is that where a new right is given in a statute, accompanied by specific remedies, the remedy is confined to those specifically given." After reciting precedents, etc., he says: "On the whole, therefore, the best opinion I can form in the matter is that there would be great doubt as to the jurisdiction of the court to entertain the matter at all, and the gravest reason to fear that the only safe course of procedure (if proceedings are taken) to adopt, viz., by *quo warranto*, would be so tedious, expensive, and uncertain, one would hesitate before advising a client upon such a line of litigation. . . . I have known several cases in which such proceedings were instituted and carried on some distance, but I have not met in my practice with any case in which a proceeding of this character has been carried to a termination."

You will agree with me that Mr. Aylesworth's opinion is second to none in Ontario; and while from a counsel of such high standing it will be seen that I was entitled to the seat, yet, owing to the wording of section 10, I was practically debarred from bringing the matter into court. It seems to me, therefore, that a change should be made in the statute governing elections whereby they would not come before the council at all, but that instead they should be taken before a judge in the territory in which the election is held, which would not only be simple, but would materially reduce the cost, to be paid by the candidate or candidates, as the court may direct. It is a well known fact that when parliament dealt with protested elections to the House of Commons, the member opposed to the government of the day almost invariably lost his cause, which led to the radical changes which have been made in the procedure in connection with such cases.

The Medical Council this year was divided into two opposing factions over the proposed changes in the curriculum; one determined to carry certain clauses, the other equally determined to prevent the same. I voted with the minority, and, figuratively speaking, against the government. It is notorious, too, that in former protests the decisions of the council have not given unmixed satisfaction; for instance, Quinte and Cataraqui, of some years ago; Malahide and Tecumseh, in 1890; Miller *v.* Russell, the same year, in reference to which the petitioner stated that he had been "snuffed out" by the council. My suggestion would relieve the council of all trouble. There would be no chance for unfavorable comment upon its ruling, as there has been in the present instance, not only by my own supporters, but by some who voted against me, by others not residing in this division, and by yourself in your editorial on the subject in your issue of July 1st. It would also be a safeguard against the minority candidate getting the seat.

Following are the reports of the Committee on Credentials under date of June 13, 1891

"The committee to whom was referred the protest against the election of Dr. Shaw for the Burlington and Home Division beg leave to report that they considered the objection to certain votes; and after a careful scrutiny of all the votes, find that Dr. Miller has been duly elected."

Dr. Bergin, Chairman.

D. L. Philip, Secretary.

To the President and Members of the Council of the College of Physicians and Surgeons of Ontario:

Gentlemen,—I beg as a member of the Committee on Credentials to present the following minority report:

1. I think the vote of the returning officer should have been allowed.

2. I think the vote of Dr. Ranney should not have been disallowed.

3. I think the vote of Dr. Cattermole should have been disallowed.

4. I think the vote of Dr. O'Reilly should have been allowed.

5. I think Dr. Shaw should have been allowed the vote of the returning officer, that of Dr. Ranney, and also that of Dr. O'Reilly, which would give him fifty-eight votes, and that the vote of Dr. Cattermole should have been disallowed to Dr. Miller, which would have given him fifty-six votes.

6. It is my opinion that seat No. 6. Burlington and Home Division properly belongs to Dr. Shaw.

All of which is respectfully submitted.

Henry W. Day.

(The Committee on Credentials was composed of Drs. Bergin (Chairman), Moore, Bray, Philip, Day, and Fenwick.)

Since the publication of the council proceedings, in which the minority report gives me the seat by two votes (see announcement pp. 221-2), my friends cannot understand why a majority of the Committee on Credentials thought, or rather reported, differently; and, at the risk of trespassing on your space, I shall endeavor to throw a little light upon the matter. The report of the Educational Committee this year was a bone of contention in the council, as will be seen by reference to its proceedings, and a very strong feeling existed in the council over the proposed changes. The chairman of the Committee on Credentials was determined to carry through some of the proposed changes, and to this end not a little canvassing was done, with the result that some of the members of the council voted one way, though, it has been stated, they promised the opposite. The test of strength was over the clause extending the student's period of study from four years to five, which has for some time, I believe, been a hobby of Dr. Bergin, chairman of the Educational Committee, as well as of the Committee on Credentials. Now, while I was in favor of raising the standard, I was opposed to the five-year clause, and so voted; but it was carried by the casting vote of the chairman when in Committee of the Whole. The protest was heard on Thursday afternoon, and the committee adjourned till 8 p.m. the same evening, but did not meet owing to the reported indisposition of the chairman, though he was apparently quite restored next morning at 9 a.m. Please notice that it had been arranged that the report of the Educational Committee was to come before the council on Friday, and Friday evening at 7.30 was appointed for the Credential Committee to meet again, but again the appointment was not kept—can any one surmise why? Was it because Dr. Bergin's pet scheme was not finally disposed of in the council, as was expected, and that it was thought best to hold the lash over me a little longer in the hope that it might influence my vote? Will some one tell me why, when the changes in the curriculum had been finally disposed of, and after the hardest and longest day's work of the session, the Committee on Credentials cheerfully met as late as 11 p.m. and remained till midnight, allowing votes against me which some of its members, unsolicited, had early in the week stated to me were, in their opinion, properly disallowed by the returning officer? I may say that at least one member of the committee, after the council adjourned, had the boldness to state that they looked upon my course (as a new man) in voting against the Educational Committee's report as a want of confidence in that committee, and intimated that I should be treated accordingly. Before I left Toronto a member of the council said to me: "Well, Shaw, I'm very sorry about this, but I told you yesterday you were voting with the wrong crowd," thus plainly conveying the information that I had been condemned on account of my vote on the Educational Committee's report. To those familiar with all the facts, it is now an open secret why the protest went against me. The committee presented its report at the close of the session after some members had gone and when others were anxious to get away to catch

the trains for home, and it was received without the council having time to inquire into its merits. Had it been presented earlier in the session, I do not doubt that the council would have done me justice, because I believe it contains many capable, honest, and faithful representatives, true to the trust committed to them. I have always been, and am yet, a strong supporter of the council, and believe it has been of great benefit to the profession; but I think there is great danger of a legislative body of its character becoming arbitrary in its enactments, and its methods assuming too much of the style of a modern "star chamber." No man can complain of being fairly and squarely defeated; but to feel that you have honestly won and then be deprived of your victory without any means of redress is, indeed, as you say in your editorial, "hard luck."

GEO. M. SHAW.

Hamilton, Dec., 1891.

Book Notices.

Transactions of the Southern Surgical and Gynecological Association. Volume III. Third Session, held at Atlanta, Georgia, 1890.

This vigorous young society is doing excellent work. We understand that that high-minded and distinguished son of the "Sunny South," Dr. W. E. B. Davis, of Birmingham, Alabama, conceived the idea of such an organization, and its pronounced success is largely due to his indefatigable efforts. This third volume of its transactions contains many good papers and discussions. Among the authors are many of the brightest lights in America, such as McMurtry, Joseph Price, Warren Potter, Charles A. L. Reed, Reamy, Howard Kelly, Engelmann, Maury, Gaston, and others. This young association promises to do great things in the future for the "New South." We congratulate its able and large-hearted enthusiasts upon the brilliant success that has already crowned their efforts.

Elements of Practical Medicine. By Alfred H. Carter, M.D., London. Sixth edition. London: H. K. Lewis, 136 Gower Street, W.C., 1891.

This book, the constant friend of the English medical student, deserves to be better known on this side of the ocean. Nowhere else within the same compass will be found such broad, truthful sketches of the various types of disease. What Walsham's work is to surgery, Carter's is to medicine.

Manual of Physical Diagnosis for the use of Students and Physicians. By James Tyson, M.D., Professor of Clinical Medicine in the University of Pennsylvania. Philadelphia: P. Blakiston, Son & Co., 1891.

Dr. Tyson, so well known by his manual on the examination of urine, offers this little work on physical diagnosis, *not* to fill a long-felt want, but simply as the outcome of his teaching of the subject to students. It certainly can be recommended to students, combining, as it does, conciseness with sufficiency.

The Physician's Visiting List. Lindsay & Blakiston, for 1892. Forty-first year of its publication. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street.

This is an admirable little pocket-book, well arranged, and very convenient in size and shape.

Book Reviews.

Surgery: Its Theory and Practice. By William Johnson Walsham, F.R.C.S., Assistant Surgeon to St. Bartholomew's Hospital, Surgeon to the Metropolitan Free Hospital, London, etc. Third edition, revised and enlarged, with 318 illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St., 1891. Toronto: J. A. Carveth & Co.

The third edition, revised and enlarged, of "Walsham's Practical Surgery, 1891," has been placed in our hands, and, after a careful perusal of it, we do not hesitate to say that it ranks high among manuals, as well as many larger and more pretentious works. The book, on the whole, is fairly well up to the times, but on closing it the reviewer cannot help wishing that its pages were more abreast of the period. We shall briefly refer to a few practical points throughout the work, as examples of how we think it might be improved. In the well-written article on brain surgery, why refer to the crucial incision? It has nothing to commend it, whereas the verdict seems unanimous in favor of the semi-circular one. A favorable

reference might have been made to the use of the chisel, out of respect to a large number of surgeons, especially the Germans. In the chapter on dislocations, the author could well have made room for a little modern material by leaving out the description for reducing dislocations by means of pulleys and the accompanying diagrams. It is rare, indeed, that the practitioner of to-day meets with a dislocation requiring the use of so much brute force as is recommended in these pages. A little further on we come to the reduction of Colles' fracture, which is dismissed in these words: "After reducing the fracture as thoroughly as possible." What practitioner or student could have any idea of the proper manipulations for the reduction of this fracture, as taught by such surgeons as Moore and Pilcher? It is only too well known that without a good knowledge of the difficulties met with in this fracture, and the way to overcome them, the results have been frequently lamentable failures. Again, what surgeon who is at all familiar with spinal surgery will be satisfied with the treatment of spina bifida? The success that has followed the ligature in these cases, using the precautions taught by Abbé and others, is somewhat dazzling, and surely merits a little attention in a standard work. Again, the reference to appendicitis is somewhat disappointing. When so much has been written on this subject of late years, it seems that any work of the present day should give the student a good insight into the various forms of this trouble and the means of relief. The chapter, an important one, on amputations is relegated to an appendix. So far as it goes, this part is made very plain; but there are many interesting points in connection with the subject that the student, if he wants to have a good mastery of it, must look for elsewhere, or draw too largely upon his common sense. There are numerous other practical points that might be referred to in a somewhat similar way throughout the work, did space permit; but sufficient has been noticed to give the reader an idea of what he will be required to fill in from other sources. It does seem a waste of time, however, for any author to give an incomplete description of any well-recognized operation; it is certainly a waste of time and money to the reader. The work of the specialist is not to be expected in a manual, but we do think that on subjects which interest and belong to the general practitioner writers of manuals should write to the times and make their productions so clear and complete that they will be useful guides to plodding ones. The work, on the whole, is so well handled by the writer, and contains so much that it will compare favorably with many high-priced works, that we cannot help thinking that, so long as manuals are found useful, this one will be in demand.

A Clinical Text-book of Medical Diagnosis for Physicians and Students, based on the most recent methods of examination. By O. Vierordt, M.D., Prof. of Med. at University of Heidelberg, formerly of Leipzig, and of Jena. Authorized translation of the second (latest) German edition, by F. H. Stuart, A.M., M.D., Brooklyn, N.Y. Cloth, $4.00; sheep, $5.00; pp. 700. Philadelphia: W. B. Saunders, 913 Walnut St., 1891; Toronto: J. A. Carveth & Co.

A review of a translation necessarily calls for treatment under the three heads of the work done by the publisher, by the translator, and by the author. Arranging them thus in the inverse order of their importance, the work done by the publisher can fairly be very highly spoken of. The type is of good size and plain, the paper and binding excellent, and the illustrations, 178 in number, particularly good, the colored microscopic fields being worthy of a special treatise upon microscopy. The translator's task is always a particularly difficult one, as the temptation to lapse into the idiom of the original is ever present, and tells seriously upon his style as a writer of his own language. This, and the other pitfalls of the translator, Dr. Stuart has fairly well avoided, though his mode of expressing himself is in some places open to criticism that is not hypercriticism. The author's work is particularly well done. This is the best text-book we have seen, regarding it both in the light of scientific classification, comprehensive arrangement, perspicuity, and suggestiveness of treatment of each subject, and, finally, modernness of method. The references to chemical and microscopical examination as a means of diagnosis in disorders of the blood and of the digestive, respiratory, and urinary systems are very acceptable, and the draw-

ings of microscopic specimens excellently done, most of them in colors. The work is done in three parts. Parts I. and II. are introductory and general; Part III. is devoted to the special consideration of the various systems of the body, respiratory, circulatory, digestive, urinary, and nervous; and with the true scientific tendency to generalizing, each "system" is treated of in the most systematic and uniform manner. The anatomy, structural and topographical, of each region is touched upon briefly but most effectively, as a "refresher," before entering upon medical diagnosis proper, and the chapter ends with the microscopic and chemical means of diagnosis now at our disposal. The only point at which, as it seems to us, the due balance of parts is not preserved is in the pages devoted to the consideration of nervous disturbances, 131 in number, most valuable to the general practitioner, but perhaps, from the student's point of view, too long. The book should be in use in all our medical schools as soon as possible. The favor with which it is regarded is proven by the fact that, though the first German edition appeared only in 1888, a second was necessary in 1889, and that it has been translated already into English, Italian, and Russian.

A System of Practical Therapeutics, by American and foreign authors. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Phila., Secretary of the Convention for the Revision of the U.S. Pharmacopæia of 1890, Physician to St. Agnes' Hospital, Phila., etc.; assisted by Walter Christie, M.D., formerly Instructor in Physical Diagnosis in the University of Pennsylvania, and Physician to St. Clement's Hospital, Philadelphia. In a series of contributions by seventy-eight eminent authorities. In three large octavo volumes of about 1000 pages each, with illustrations. Price per volume: Cloth, $6; leather, $7; half Russia, $8. Toronto: J. A. Carveth & Co.

It is scarcely necessary to dilate on the vast importance of practical therapeutics in the practice of medicine, as the fact is generally appreciated by intelligent physicians. A large and complete work like this, published by such a company as Lea Brothers & Co., will be examined with interest by the majority of practitioners who have the opportunity of seeing it. The publishers, thinking that the subject is so broad that no one man can be fully conversant with all its divisions, have endeavored to secure the co-operation of a number of collaborators having special fitness in the various departments. We know of no better way of giving our readers an idea of their success in this direction than by furnishing a partial list of the contributors to Vol. I., with subjects treated, as follows: General Therapeutic Considerations, by Horatio C. Wood. M.D., LL.D.; Prescription Writing, by Joseph P. Remington, Phar. D.; Electricity, by A. D. Rockwell, M.D.; Rest-Cure and Neurasthenia, by John K. Mitchell, M.D.; Massage, Swedish Movements, by Benjamin Lee, A.M., M.D., Ph.D.; General Exercise, by Edward Murray Hartwell, Ph.D., M.D.; Climate, by S. Edwin Solly, M.R.C.S., L.S.A. London; Hydrotherapy, including Baths and Mineral Springs, by Simon Baruch, M.D.; General Sanitation, by Henry B. Baker, M.D.; Disinfection, by George M. Sternberg, M.D.; Antisepsis and Asepsis, by J. William White, M.D.; Nutrition and Foods, including Obesity and Leanness, by I. Burney Yeo, M.D., F.R.C.P.; Tuberculosis, by Solomon Solis-Cohen, M.D.; Scrofulosis and Rachitis, by Walter Chrystie, M.D.; Acute and Chronic Rheumatism, Rheumatoid Arthritis and Gout, by James Stewart, M.D.; Scurvy, by John B. Hamilton, M.D.; Diabetes Mellitus, by Frederick A. Packard, M.D. Judging from the character of the first volume, we have no hesitation in saying that the complete work will be one of the most interesting and valuable which has ever been offered to general practitioners.

Annual of the Universal Medical Sciences, Vol. IV. Edited by Sajous. Toronto: J. A. Carveth & Co.

This book is eminently calculated to interest specialists rather than general practitioners, though the latter, too, may find profit from its perusal. As an attempt at *précis* writing, the object being to get a bird's-eye view of the enormous and ever-widening field of medical literature, the work seems a success. The character of the volume may be judged partly from a partial list of its contents:—Diseases of the skin; opthalmology; otology; diseases of

the nose and accessory cavities; diseases of the pharynx, tonsils, and soft palate; diseases of the larynx, trachea, and œsophagus; intubation of the larynx; diseases of the thyroid gland; inebriety, morphinism, and kindred diseases; legal medicine and toxicology; medical demography; histology and microscopical technology; bacteriology. The letter-press is very good, the bibliography and references very full, though so introduced as to economize room to the utmost, and the illustrations excellent and not few. Two very good chromo-lithographs are given in the chapter on diseases of the skin of Mr. Treves' famous "Elephant Man," with a synopsis of his account of his unfortunate patient in the *British Medical Journal.* The article on bacteriology by Ernst and Jackson contains much interesting information, in short space, on the work more recently done in tuberculosis (in which of course Koch's name occurs often), in typhoid, anthrax, carcinoma, rodent ulcer, cow-pox, diphtheria, distemper in dogs, hog cholera, malaria, meningitis. In a paragraph on parasitic and pathogenic protozoa, psorospermes, the name of Professor Ramsay Wright, and the paper he read at the opening of the Biological Department, are prominently mentioned.

Pamphlets Received.

The Work of Medicine for the Weal of the World. By C. H. Hughes, M.D., St. Louis. Advance reprint from *Alienist and Neurologist.*

Personal.

DR. STEPHEN LETT, of Guelph, was rather seriously ill early in December from the effects of exposure and cold in consequence of his brave act in rescuing a couple of children from drowning during the first cold wave which appeared during the latter part of November. The little ones were playing on the ice of the River Speed, when they broke through, and after struggling in the water for a time were rescued with great difficulty by Dr. Lett, who managed to carry both to the shore. The doctor, as well as the children, had been in the water for some time, and all were more or less affected; but the former in looking after the latter forgot his own condition for a considerable period, and suffered seriously for over a week thereafter. Even now he has not quite recovered, although he is gradually improving, and we hope that ere long he will be entirely restored to health.

THE following officers were elected at the annual meeting of the New York Obstetrical Society: President, Dr. Clement, Cleveland; 1st vice-president, Dr. Malcolm McLean; 2nd vice-president, Dr. W. Gill Wylie; recording secretary, Dr. Arthur M. Jacobus; assistant recording secretary, Dr. Goffe; corresponding secretary, Dr. J. Boldt; treasurer, Dr. Morrill; pathologist, Dr. J. H. Gunning.

DR. T. S. CULLEN (Tor. 1890), who has been in Baltimore for some months, paid a short visit to Toronto last month. He has returned to Johns Hopkins Hospital, where he will act for one or two years as resident-assistant in the gynecological department under Dr. Howard Kelly.

DR. L. F. BARKER (Tor. 1890) spent the summer in a hospital for sick children in the suburbs of Baltimore. He is now resident-assistant in Johns Hopkins in the medical department under Dr. Osler.

DR. JAMES F. GOODHART delivered the Harveian Lectures November 19, 26, and December 3, on the subject, "Common Neuroses, the Neurotic Element in Disease, and its Natural Treatment."

DR. W. H. HINGSTON, of Montreal, has been invited to deliver an address at the next meeting of the British Medical Association, which will be held in London.

DR. GRANVILLE BANTOCK, of London, was elected a corresponding member of the Obstetrical Society of Leipsig on the occasion of the celebration of its 400th meeting.

THOMAS WHARTON JONES, F.R.S., F.R.C.S., Professor of Ophthalmic Medicine and Surgery at University College, London, for thirty years, died in November at the age of 84.

PROF. MOSELEY, F.R.S., the distinguished zoologist of Oxford, died in November from pneumonia. He had been for some time suffering from an incurable mental disease.

DR. GOOD, of Winnipeg, according to *The Toronto Mail* of Dec. 7th, was suffering from typhoid, but on the 19th was said to be recovering.

Dr. W. H. B. AIKINS went to Winnipeg, Dec. 9th, on account of the illness of his brother, Mr. J. A. M. Aikins.

Dr. BUCKE, the superintendent of the Asylum for Insane, London, went to Philadelphia to see his old friend, Walt Whitman.

DR. STEINTHAL, the Dean of the Medical Faculty of Berlin, is 93 years of age. He has been in practice for seventy years.

SIR JAMES RISDON BENNETT, of London, England, died December 16.

DR. W. BURT, of Paris, who has been ill since September, is recovering.

Therapeutic Notes.

GLYCO-GELATINE IN SKIN DISEASES.— In recent years no more useful advance has been made in the treatment of skin diseases than the adoption by Unna of a compound of glycerine and gelatine (glyco-gelatine). The best basis for the incorporation of all other drugs appears to be the zinc oxide of glyco-gelatine, of which there are two forms (A soft, B hard), composed as follows:

	A (SOFT).	
Zinc oxide,	. .	15 parts.
Gelatine,	. .	15 "
Glycerine,	. .	25 "
Water,	. .	45 "
	B (HARD).	
Zinc oxide,	. .	10 "
Gelatine,	. .	30 "
Glycerine,	. .	30 "
Water,	. .	30 "

Iodide of lead, precipitate, chrysarobin, sulphur, and iodoform, are all miscible in any proportion—5 to 10 per cent. is a suitable proportion for the first three mentioned, 20 to 30 per cent. for the last two. Carbolic acid, salicylic acid, resorcin, naphthol, creasote, exercise an inhibitory action on the setting of the gelatine, and should only be incorporated with the hard variety up to 10 per cent. Fats, balsams, tars, and ichthyol have a diluting and loosening effect, and should be prescribed with the hard variety, and not in larger proportion than 33 per cent. Substances in powder form may be used, but never in greater quantity than the proportion of gelatine. Camphor and chloral may be incorporated up to 2 per cent., ext. cannabis indica to 5 per cent., hydrarg. perchlor. up to 3 per cent.

The method of application is excessively simple. The solid glyco-gelatine is melted in a hot-water bath. It is then applied with a paint-brush to the affected region and dabbed over immediately afterwards with a roll of absorbent cotton wool; thus a sort of skin is formed, which acts as a protector and as a medium by which the medicaments may be kept in constant contact with the skin. Besides this, it acts beneficially by its slight compressing effects, producing a localized anæmia, also favoring the absorption of inflammatory products.

Indications for application:

(1) Pruritus, both simple and senile, if uncomplicated.

(2) Artificial dermatitis, produced by free use of mercurial ointments, alcoholic inunctions, irritation from chrysarobin, salicylic acid, resorcin, etc.

(3) Erythema and rhagades, which disappear very quickly.

(4) Acute and localized eczema, when not weeping.

(5) Pruritic eczemas (the ichthyol 2 per cent. or cannabis indica 5 per cent., zinc glyco-gelatine).

(6) Inflammatory acne. (In some cases a 20 per cent. sulphur, or 5 to 10 per cent. resorcin, zinc. gelatine acts admirably.)

Besides the above indications, zinc glyco-gelatine is very useful as an adjuvant in the treatment of lupus, tinea tonsurans, etc. For efficacy, cleanliness, and comfort, glyco-gelatines can not in selected cases be equalled by any other method of topical application.—NOYES, *Med. and Surg. Reporter*

TREATMENT OF A "BAD COLD."—Dr. John Auld, of Philadelphia, speaks as follows (*Med. Record)* about the treatment of a "bad cold": "For the benefit of those members of the profession who are on the outlook for improvements upon the methods of bygone days, I venture to offer a single remedy for the treatment of a 'bad cold' that is far superior to all others. Gelsemium is not only useful in those cases which would recover without medication, but is also efficient when formidable symptoms are present, and, judiciously employed, may be the means of averting an attack of pneumonia, pleuropneumonia, pleurisy, or other serious disease beginning in the form of a bad cold. Gelsemium arrests profuse nasal secretions, quiets headache and neuralgia, subdues cough and pain, favors a re-establishment of the secretions, through its influence upon the skin, kidneys, and gastro-intestinal tract. It reduces temperature and pulse rate, promotes sleep, and creates a feeling of comfort and well-being without in any way approaching narcosis or destroying the oxygen-carrying capacity of the blood-corpuscles. By the use of this single remedy, much discomfort to the patient is avoided, digestion remains undisturbed, nauseating draughts are banished, the necessity for purgatives precluded, and all dangers of subsequent relapse practically eliminated; while recovery is prompt, perfect, and satisfactory in every particular. Ten drops of a reliable fluid extract (assayed) are dissolved in three ounces of water, and of this mixture the patient takes a teaspoonful every ten or fifteen minutes for an hour, then at less frequent intervals, according to the effects produced. The plan is simple, the medicine harmless in the dosage recommended, and not at all unpalatable, and the claims for it can be verified almost any day of the week, at this season of the year, by submitting the remedy to the crucial test of clinical experience."

THE TREATMENT OF TYPHOID FEVER BY PERCHLORIDE OF IRON.—I have intended making a communication on this subject to the *British Medical Journal* for some time, but the present moment seems favorable to a brief statement of a mode of treating typhoid fever which I have already more fully described in a thesis to Edinburgh University, and which has had very remarkable results in my hands, no case of typhoid having died for several years where the treatment has been begun before essentially fatal conditions had arisen, such as perforation.

The treatment consists in administering a full dose of the liq. ferri perchloridi fort., namely, 5 minims (for an adult) every hour of the day and night, until a week has elapsed from the complete subsidence of the fever. To enable the patient to take this, the dose is combined with half a drachm of glycerine or one drachm of simple syrup, and a few drops of tinct. zingib. fort., and diluted in a tumblerful of water. If sickness is caused, 5 grains of bismuthi subnit. are given ten minutes before each dose of the medicine until nausea ceases to be produced. In a few days the diarrhœa will be arrested, and thereafter a mild aperient must be given daily as long as the medicine is continued.

In a moderately severe case not brought under this treatment until the end of the first week of fever, it will take ten days to reduce the temperature to normal. If the medicine is not given every hour night and day, it will take a little longer; if begun within two or three days of onset of fever, the latter will be gone in about five days. The patient sleeps in the intervals between the doses at night, and of all the serious symptoms of typhoid most never appear, and any present at first disappear rapidly.— J. W. Anderson, M.A., M.D., Edin., in *British Medical Journal.*

NUTRITIVE ENEMATA.—M. Ewald, in his researches on nutritive enemata, arrived at the unexpected conclusion that, even when not peptonized, eggs are partly absorbed by the mucous membrane of the rectum.

A Swiss *confrère,* Dr. Huber, having lately taken up these researches of Ewald in the medical clinic of Professor Eichhorst, at Zurich, found that the absorption of eggs by the rectal mucous membrane was considerably increased, to the extent of becoming almost equal to that of peptonized eggs, by adding to the enema one gramme of chloride of sodium for each egg. The addition of common salt in the quantity mentioned is well borne, and ordinarily produces no irritation of the intestine.

It appears established, then, that for the

present, at least, the best nutritive enema is one composed solely of raw eggs beaten up with common salt. M. Huber advises that two or three eggs, with the addition of two or three grammes of salt, be used for one enema. It should be introduced slowly by means of a Hegar's funnel, and a soft rubber tube passed up the bowel as far as possible.

The patient receives three such enemata every day. An hour before each nutritive enema his bowels are evacuated by means of an enema of water.—*Mercredi Medical*, April 1st, 1891.—*Lyon Medical*, May 3rd, 1891.—G.A.F.

STITES' TEST FOR CARCINOMA.—In the *Medical News* Dr. Brinton, gives a description of this new test. He says: The new method of examination was that furnished me by Professor Chiene, of Edinburgh, which I give in his own words: (1) Excise the mamma. (2) Wash thoroughly in water to remove the blood. (3) Place in a 5 per cent. solution of nitric acid (B.P.) for ten minutes. (4) Wash in cold water for five minutes. By the time these procedures are executed, the axilla is cleaned out, and the vessels tied. The mamma is now examined; the carcinomatous structure appears a dull white, like the eye of a boiled fish, the healthy tissue translucent. When any such reaction is seen, additional tissue should be removed at the corresponding point. In removing the carcinomatous breast, Professor Chiene directs that its relations to the circumferential tissues should be marked by the knife, so that after the test has been applied to the mass excised the situation of any outlying unremoved diseased areas can be fixed.

TREATMENT OF EARACHE.—The acute pain accompanying otitis is often relieved by the following mixture:

Chloroform . . .	1 gr.
Olive Oil	8 grs.

Twenty to forty drops to be poured into the auditory canal, which is then closed by a little plug of cotton wool.

In cases of pain due to furuncle of the auditory canal, the relief is even more complete and immediate if, for the previous liquid, the following is substituted:

Menthol	1 gr.
Olive Oil	20 grs.

—*Medical Record.*—*Gazette des Hopitaux*, Oct. 22nd, 1891.—G.A.F.

THE TREATMENT OF THREAD-WORMS BY NAPHTHALINE.—Minerbi has used naphthaline in the treatment of thread-worms. Eleven children infected with this parasite were cured by its use in less than eight days. The formula employed was the following:

Naphthaline	1 gr. to 1 gr. 50.
Olive Oil	40 to 60 grs.

For one enema.

In the adult larger doses must be used.

Naphthaline . . .	5 to 6 grs.
Olive Oil	60 to 80 grs.

For one enema.

—*Médicine Modérne*, April 2nd, 1891. *Lyon Medical*, May 3rd, 1891.—G.A.F.

TREATMENT OF ECZEMA OF THE VULVA.—Lusch (*Journ. des Sages Femmes*, 1891) recommends the following treatment for vulvar eczema. A lotion is made, consisting of bicarbonate of soda, 8 parts, by weight; bicarbonate of potash, 4 parts; glycerine, 6 parts; tinct. opii (French, *Codex*, 1 grain of extract of opium in 12 minims), 8 parts; and water, 250 parts. This lotion is applied night and morning to the vulva. After each application the parts should be dusted with a mixture consisting of powdered starch, 98 parts, and pulverized camphor, 2 parts.—*British Medical Journal.*

FOR the relief of nausea and vomiting consequent on etherization, one of the best remedies is chloroform gtt. iv. or v. with gtt. ii. or iii. of vinegar of opium, given two or three times a day. A hypodermic of morphine, gr. ⅙, after the operation, controls the nausea, puts the patient to sleep, giving the stomach and nervous system time to recover themselves.—Brinton, in *Times and Register.*

DRYSDALE recommends exercise in the open air for diabetics. Walking or riding for several hours daily are excellent remedies. The patient

should take to gardening and pass much of the day out of doors, whilst for rainy days carpentering is most beneficial.

LEUCORRHŒA is, according to Dr. Louis Bauer, often due solely to constipation, hence clearance of the bowels of their fæcal contents is in many cases the chief and most effective treatment of that troublesome disorder.—*Med. Record.*

THE free use of pine-apple juice is recommended to dissolve the membrane of diphtheria. It contains a vegetable pepsin analogous to papoid.

Miscellaneous.

ANTIKAMNIA.—Dr. W. Thornton Parker, of Manchester-by-the-Sea, Mass., thus writes of this remedy: *Gentlemen*,—Antikamnia is no longer a stranger to the medical profession, but is daily winning laurels in its mission as "opposed to pain." Briefly stated, it is indicated in cephalalgia, neuralgia, attacks of acute rheumatism, locomotor ataxia, sciatica, and the disorders of menstruation accompanied by pain. Dr. Holland, in *The Medical Summary* of May, describes an interesting case of dysmenorrhœa promptly relieved by its use. My own experience confirms this. I believe it to be one of the best remedies for the relief of pain in this disease. So far as my experience goes, we need not anticipate unfavorable after-effects; its action is soothing, tranquilizing, and diminishes the tendency of a rise of the bodily temperature, It is best exhibited in doses of from three to ten grains every three or four hours, in powder or tablet form, taken in water or wine.

BOVININE is being highly recommended by medical practitioners. Dr. G. H. Price, in the *New England Medical Monthly*, says of it: "There are certain cases where this blood renewer (for such it is, pure and simple) can have its place taken by nothing else. It is not a medicine *per se;* it is a food; even more, it is, as Prof. Waugh, of Philadelphia, asserts, "one step beyond a food; it has received the finishing touches and has become the *vital fluid itself.*"

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ABDOMINAL NEPHRECTOMY FOR HYDRONEPHROSIS, WITH A REPORT OF TWO OPERATIONS.*

BY J. WISHART, M.D., F.R.C.S. EDIN., M.R.C.S. ENG.,

Professor of Clinical Surgery, Medical Dept., Western University.

There can be no doubt that the past years have been progressive ones in abdominal surgery; nevertheless most practitioners who have attempted any operating in this region will have felt on many occasions, not only lack of precision in diagnosis, but grave difficulties arising during the operative procedures that become necessary in most of these cases. In studying the operative surgery of the kidney, it is interesting to observe that while fifteen or twenty years ago a large proportion of the operations were performed after an error in diagnosis, during the last few years a correct diagnosis before operation has been the rule, although many exceptions are to be noted. The difficulty, it would appear, is increased in cases of great enlargement of the organ where the patient, when seen for the first time, presents a tumor filling the whole abdomen. In the two cases of advanced hydronephrosis that I am now about to report, the making of a correct diagnosis appears to me to be singularly difficult. This is owing chiefly to the size of the tumor and the great similarity in each to ovarian cyst. In both cases I have to admit an error in diagnosis, and in both I commenced operation on this wrong opinion. Whether a second error was committed in treatment I leave to the judgment of the Association, as there is diversity of opinion in the profession as to the operation to be performed in hydronephrosis.

Case 1. Mrs. P., æt. 31, married six years and the mother of two children. Residence, Thamesford, in county of Middlesex, but a native of England. Parents living and healthy; no family history of ill-health or hereditary disease. Patient below the average in height and weight, and of pale complexion. She gives a history of fair health in childhood, but during the past fifteen years has suffered from pain in the right side beneath the liver, and before coming to Canada she attended the out-patient department of St. Bartholomew's Hospital, but got no relief from treatment. About the first week of May, 1889, she discovered an enlargement in the abdomen, which steadily increased in size.

On the 18th June, five weeks after this, she was admitted into St. Joseph's Hospital, and presented a letter from her family physician, Dr. McWilliams, who examined her and made the diagnosis of ovarian cyst. There was dullness in the median line, fluctuation resonance in the flanks. The measurement, greatest below the umbilicus; distance from umbilicus to iliac spines equal on the two sides. The tumor occupied all the abdomen from the pubes to the

*Read at the meeting of the Ontario Medical Association, June, 1891.

sternum, but the patient said she thought it was more to the right side at first; no tumor could be felt in the pelvis. Examination of the heart, lungs, and liver, negative; catamenia, regular. Uterus normal in size, and movable. Specific gravity of urine, 1028; no albumen or sugar.

The patient was carefully examined by Drs. Moore, Macarthur, and Waugh, and the diagnosis of Dr. McWilliams confirmed. I wrote him saying the disease appeared to be ovarian, but the tumor seemed to me to be a little higher up than other cases I had operated upon.

On June 20th chloroform was given and an incision made in the median line and an enormous cyst of the right kidney discovered, which, fortunately, had no adhesions to surrounding parts.

The incision was enlarged upwards, the intestine drawn towards the left side, the peritoneum divided over the tumor, and enucleation commenced. The ureter was tied and cut off. There was much difficulty experienced in securing the vessels and separating the upper end of the tumor from surrounding parts. At this point in the operation the cyst burst, and considerable fluid escaped into the abdomen. This had a peculiar urinous odor, but was quite clear. The abdomen was sponged out with warm water, the edges of the peritoneum adjusted over the raw surface, and the wound stitched up in the usual manner with silk. No drainage tube was used, and the sublimate gauze dressing was secured with plaster and a binder of flannel. All went well for the first week; the sutures were removed on the eighth day and the wound found united. The highest temperature recorded up to this time was 101½° F.

On the tenth day the temperature reached 103, later on 104½, with occasional chills and delirium at night, hay odor of the breath, and for almost three weeks her life was in considerable danger. On the 21st day, fearing that an abscess had formed, I passed the aspirator needle beneath the twelfth rib into the abdomen, but nothing came through. After this recovery was slow, but continuous, and the patient was able to leave the hospital on the 1st September and attend to her duties.

Case 2. Mrs. T., æt. 43; a widow, and mother of seven children. Residence, Goderich. Admitted to St. Joseph's Hospital, July 11th, 1889, and gave the following history: She always had good health and led an active life; never was confined to her bed except during her confinements. Six months ago the abdomen commenced to enlarge, and this had continued to the time of admission. There never had been any pain, but the tumor now began to cause discomfort from its size.

Two physicians in Goderich had made an examination, she informed us, and both had recommended operation. The abdomen showed a large fluctuating tumor extending from the pubes to the ribs, dull in the median line, resonant in the loins; measurement greatest below umbilicus. No tumor could be felt in the pelvis. Examination of the heart, lungs, and liver, negative; uterus movable and normal in size; catamenia, regular.

The tumor was much larger than in the case just related. The patient was well nourished and rather stout in figure. Drs. Woodruff, Waugh, and Macarthur were called in consultation, and, as the last case of mistaken diagnosis was still in the hospital, a very careful examination was made in order particularly to exclude hydronephrosis. The diagnosis of ovarian cyst was made and an operation recommended. Specific gravity of urine, 1030. No albumen or sugar.

On 13th July chloroform was given and the usual incision made in the median line. The opening revealed an enormous cyst of the left kidney, filling the whole abdomen. The peritoneum over this was incised and the tumor enucleated, the ureter cut off and tied, and the renal vessels secured with silk ligature. The operation, as in the last case, was difficult, and the wall of the cyst gave way notwithstanding all my care. The clear fluid escaped, much of it getting into the abdominal cavity. Warm water was poured into the abdomen and the peritoneum adjusted over the bed of the tumor. There were no adhesions, but the bleeding was considerable and difficult to control. The patient had no bad symptoms; the silkworm gut sutures were removed on the eighth day and the wound found healed. On the tenth day the temperature ran up to 103, the pulse quickened, the tongue became coated, and the abdomen swelled. These symptoms continued, the temperature varying somewhat, but always being

above normal. This was followed by a discharge from the vagina, described by the sister in charge as composed of blood and pus, and very offensive. Injections of carbolized water were ordered twice a day, and nothing more was heard of this symptom.

After this, improvement took place slowly, and the patient had completely recovered by September 10th, when she left the city for her home.

In the early stage, before an abdominal tumor is noticeable, hydronephrosis has to be diagnosed from renal abscess, perinephritic abscess, nd extravasation of blood. When of small size it may be mistaken for hydatid or serous cyst of the liver or spleen. Between hydronephrotic and pyonephrotic tumors the diagnosis is sometimes impossible. In some cases of the latter disease, however, pus appears in the urine. The treatment being similar in the last two, an error in diagnosis would not endanger the life of the patient, and no doubt, in many cases, suppuration is set up from accident, so that pyonephrosis is simply an advanced stage of hydronephrosis. The greatest difficulty is experienced in excluding ovarian cyst, and my object in this paper is to show that this is almost impossible. I mean in advanced cases where the cyst fills the abdominal cavity, as in the two last operations reported. In the first we have a history of pain in the side and an enlargement commencing, the patient tells us, in the lower part of the abdomen, a little to the right side. This enlarges in the short space of four or five weeks until it fills the abdomen. The measurement is greater below umbilicus, and the distance from this point to the iliac spines is equal on the two sides. There is fluctuation, dullness on percussion in the median line, and resonance in the flanks. Examination by the sound shows a healthy and movable uterus. In the first case, the smaller of the two, the tumor appeared to me to be just a little higher than the average ovarian cyst, but this was accounted for by an elongated pedicle. The absence of the cyst by a vaginal examination is explained in the same manner. The rapidity of growth, the size, and absence of urinary symptoms, together with the healthy condition of the urine, point to ovarian tumor, and negatives, we might also say, hydronephrosis. I cannot think that the mistake in diagnosis is due to carelessness. The first case had been examined by Dr. McWilliams, who sent her to me; then by three other physicians of experience and reputation, who all came to the same conclusion. The plea of carelessness certainly cannot be argued in the second case. This one came into the hospital while the first was in bed and not yet recovered from the operation. She was examined by two of the consultants called in the previous case. I mentioned to them to be sure and exclude hydronephrosis this time, and the examination was made with the probability of cyst of the kidney constantly in view and the diagnosis of ovarian tumor made. In this case the history of an enlargement of six months' duration, giving rise at first to no symptoms, and later on only those of pressure, measurements alike from umbilicus to iliac spines, girth greatest below umbilicus, fluctuation distinct, dullness in the median line, and resonance in the flanks; uterus movable, normal in size, and healthy; tumor filling the whole abdomen from the pubes to the ribs, and reaching to the same position on the two sides. I find from reading that there are at least fifteen cases on record in which hydronephrosis or simple renal cyst have been mistaken for ovarian tumors and laparotomy performed on the erroneous diagnosis. Out of the twelve cases in women collected by Morris, no less than seven of these were diagnosed as ovarian, and three of the seven were submitted to abdominal section on the strength of this wrong opinion. From a study of the literature of this subject and my experience of these two cases, I arrive at the conclusion that a diagnosis between advanced hydronephrosis and ovarian cyst is, to the average practitioner, an impossibility. If I am correct in taking this view, it has an important bearing on the subject of treatment, for the question the surgeon has to answer is not what is the best treatment for hydronephrosis, but, the abdomen having been opened on the supposition that an ovarian tumor exists, and a cyst of the kidney discovered, what are we to do? Shall we close the abdomen and call it an exploratory incision, or cannot we stitch up the wound after opening the cyst and drain from the loin? Can we perform nephrectomy by enucleating the tumor? I must confess that I am not partial to explora-

tory incisions for diagnostic purposes in private cases. My patients call them operations. The friends imagine a mistake has been made, and say they do not want to be cut open to satisfy the curiosity of the doctor. I am of opinion, therefore, that something should be done to get rid of the disease. If the distension increases, death will result from the effects of pressure on neighboring organs, from rupture into the peritoneum, or suppression of urine or uræmia. I might here revert to the views of different operators in the treatment of hydronephrosis in general.

"Puncture," writes Knowsley Thornton, "may also be tried as a means of treatment, though I believe there is no good evidence that cures are often affected by it. It should be performed by the aspirator, the needle being introduced far back in the loin to avoid risk of puncturing the colon, peritoneum, or allowing extravasation of urine into the cavity of the latter. If relief follows, it may be repeated from time to time; but if the fluid reaccumulates, some more radical operation must be undertaken. I have completely failed in two cases with incision and drainage, and I believe that nephrectomy is the proper treatment in all cases which do not improve after one or two tappings." Mr. Morris writes thus of drainage: "This practice has been very successful, and ought certainly to be adopted when aspiration fails and before nephrectomy is dreamt of. In a few cases a complete cure will be affected and the wound will quite close. In the majority, however, a fistula must be expected, but this gives very little inconvenience to a person of ordinary intelligence and patience." Barker writes that "free drainage for hydronephrosis is not much more successful than aspiration, and not devoid of risk. Of course a large sac will be in a better position to contract if freely and continuously drained than if occasionally emptied, but time is consumed in the process of drainage, the necessity often lasting for months for constantly changing the wet dressings; again, there is always the risk of suppuration in the sac, with subsequent septic infection." Mr. Barker therefore favors early nephrectomy. Jacobson recommends that "in healthy patients nephrectomy should be had recourse to after two months' trial of drainage, providing the other kidney be healthy."

Spencer Wells, in his work on abdominal tumors, records the case of a woman, æt. 43, who was operated upon at the Samaritan Hospital for supposed ovarian tumor, and an enormous renal cyst found. This was tapped, but no attempt at removal was made. The wound was closed, and the patient died thirty hours after operation. The authors quoted are evidently discussing the treatment of hydronephrosis in the early stages, when a diagnosis is possible, and when we are able to say not only that a cyst of the kidney exists, but likewise the side of the body it is on. In the class of cases under consideration, we approach the subject from a very different standpoint. We are expecting to find an ovarian tumor, and an incision has been made in the median line at least four inches long; preparation has been made for an operation and the patient has gone under chloroform with the understanding, no doubt, that she will be rid of her disease.

Under these circumstances, two operations might suggest themselves to the operator: Nephrectomy, by somewhat enlarging the incision, and at the same time making an examination of the other kidney to insure its soundness, or drainage by incision in the loin. It might be well for the operator to consider the age and general condition of his patient in weighing the merits of the two operations and deciding which to perform. The immediate danger of nephrectomy is much greater than after ovariotomy, and is certainly much more to be dreaded than tapping from the loin and stitching up the abdominal wound. In one case, however, the disease is removed, the patient rid of the useless organ, and recovery is complete. In the other, a cyst is being drained which is larger than the patient's head; there is little prospect of a complete cure. At best there remains a fistulous opening, the patient requires to wear a urinal, there is always the danger of suppuration being set up and septic infection following, and the danger of lardaceous disease from the former is not to be lost sight of. In either case we must constantly bear in mind the fact that the patient has only one kidney, which renders any operation more dangerous to life.

On looking up the literature of hydronephrosis, I find that about one-third of the cases are

congenital. The affection is due to obstruction somewhere between the kidney and meatus urinarius. It is most commonly situated in the ureter. Among the causes mentioned are twists or contractions of the ureter, impacted calculus, stricture of the urethra, enlarged prostate, tumors of the ovary, bladder, or uterus. Of thirty-two cases recorded by Roberts, the cause was found to be impacted calculus in the ureter in eleven. From the records of *post mortems* in the Middlesex Hospital, it appears that in every eighteenth case there was sufficient hydronephrosis in one or both kidneys to be mentioned in the report.

Although the disease is quite common, the proportion of cases in which the enlargement of the organ is sufficient to form an abdominal tumor is very small. The fluid is usually clear and almost odorless, but there are many exceptions to this rule. The disease is twice as frequent in females as males, occurs at any period of life, and affects each kidney about equally, but may occur in both. The quantity of fluid is sometimes enormous. One case is reported where the woman measured 6 feet 4 inches around the abdomen and the cyst contained thirty gallons. The enlargement may lessen in size or intermit from escape of the fluid into the bladder.

Morris says: "Up to the present time there have been at least twenty-seven nephrectomies for hydronephrosis, of which sixteen were abdominal and ten lumbar. Of the sixteen abdominal cases seven recovered, and of the ten lumbar cases seven recovered. In one the character of the operation is not stated, four of the fatal cases were diagnosed ovarian, and three of the successful abdominal cases are also diagnosed ovarian or broad ligament cysts." It would appear, therefore, from reading this author, that up to the present time abdominal nephrectomy has been more fatal than lumbar. We must recollect, however, that most of the abdominal cases were ones of mistaken diagnosis. In fact, cases supposed to be ovarian, and therefore advanced cases, were removed at a time when any operation, abdominal or lumbar, would have been hazardous.

I am firmly of opinion, however, that in those cases where a large tumor fills the abdomen, the lumbar operation cannot be entertained, as it is difficult or impossible to say which kidney is the diseased one, and the cyst is too large for this plan of operation.

In closing this very imperfect survey of the subject of hydronephrosis, I would beg leave to submit the following conclusions:

(1) That in a large proportion of cases of advanced hydronephrosis, where the tumor fills the abdomen, it is impossible for the average operator to say whether he has a cyst of the kidney or an ovarian tumor.

(2) That, supposing hydronephrosis is suspected, it is not possible to say which kidney is the diseased one.

(3) The last two propositions being admitted, it follows that, in all these advanced cases, incisions in the loin and drainage cannot be advocated, as the surgeon is unable to say which side to incise.

(4) In view of these difficulties in diagnosis, it would seem preferable to make an incision in the linea alba and complete the diagnosis with the hand. If the case be a cyst of the kidney, carry the incision upward and complete the operation by enucleating the tumor.

(5) This operation is suitable alike for cases of hydro- or pyonephrosis, the danger of course being greater in the first.

(6) That abdominal nephrectomy by the median incision is a difficult operation, owing to the high position of the tumor, the close relations of the aorta and vena cava, the large size of the renal vessels, and the fact that the tumor is behind both layers of peritoneum.

(7) If a correct diagnosis could be made, I am of opinion that abdominal nephrectomy by incision along the linea semi-lunaris is the best operation for the class of cases under consideration, but I do not think it possible to remove such large cysts by incision in the loin.

(8) In the case of a weak patient, or one advanced in years, supposing the abdomen to have been opened, it might be the safer procedure to open the cyst and drain from the loin. This operation is safer than nephrectomy, but it usually leaves a permanent fistula.

(9) In view of the symptoms observed in the two cases reported, I think it would be advisable in completing the operation of abdominal nephrectomy to secure drainage by making an opening in the loin.

Selections.

THE POSSIBILITY OF HASTENING SUCCESSFULLY THE CRISIS IN PNEUMONIA.—Undoubtedly, with our present methods of handling disease, many of the ordinary illnesses which make up the large part of the routine work of every practising physician are treated in as thoroughly a scientific and successful manner as they ever will be. If advancement is to be made, it must be done through radically different channels. Bacteriology seems to be at present the great field through which general medicine is to receive its impetus for the future.

In this connection it is encouraging to note the increased report of inoculation experiments with the toxine and antitoxine of the various pathogenic germs found in different diseases. The use of the ptomaines of the hog-cholera bacillus received notice, editorially, a year ago. Since then there have been many other reports, notably on the establishment of immunity from tetanus and diphtheria from inoculations with the chemical products of their bacilli.

One of the latest contributions to this subject is concerned with the possibility of conferring immunity against pneumonia in man by the injection of the products of the pneumococcus. G. and F. Klemperer (*Berliner klinische Wochenschrift*, August 24th and 31st, 1891) have been guided in their experiments by the knowledge that, in most instances, pneumonia, after a course lasting from five to seven days, terminates abruptly by crisis. In the course of a few hours the patient becomes remarkably better; the temperature comes down and the pulse becomes slower and firmer. Yet there has been, during the occurrence of this phenomenon, practically no change in the condition of the lungs, which still remained filled with fibrinous exudation. Pneumococci are still found after the crisis in great numbers in the sputa, and still retain all their virulence.

It seems, therefore, to these observers that the crisis in pneumonia does not depend on any change in the condition of the lungs or in the micro-organisms which are found in the disease, but that the improvement is due to the fact that the products of the pneumococcus modify their virulence in some manner after a certain period.

These German pathologists claim that the pneumococcus, when introduced into the body of an animal, gives rise to a *pneumotoxine* which can be isolated. This pneumotoxine is able to produce a febrile reaction lasting several days, after which another substance, *antipneumotoxine*, is produced, which has the property of neutralizing pneumotoxine.

The manner in which immunity is conferred is explained by these observers in this way: Antipneumotoxine, which is found after the crisis in patients suffering from pneumonic infection, has the power of neutralizing the active poison of the disease, and allows nature to reassert herself.

These observers have tried the injection of antipneumotoxine in a few patients suffering from pneumonia. The antipneumotoxine which they use for this purpose they obtain from the blood-serum of animals in the stage of pneumonic crisis. They found that in all these patients a hypodermic injection of four to six cubic centimetres of serum was followed, in from six to twelve hours, by a considerable fall in the temperature, with slowing of the pulse and respiration.

Of course, further investigation of these conclusions, especially in the hands of other observers, is necessary before deciding on their practical value.—*Univ. Med. Mag.*

CHROMIC ACID IN THE TREATMENT OF CYSTS.—Within the last few months I have treated with chromic acid three cases of ranula and seven of cystic goitre with such satisfactory results that I venture to make them known. The three cases of ranula occurred in two males and one female; the former had received previous treatment without any benefit; the latter had not sought advice before. All three had large cysts, and the mode of treatment followed was the same in each. A portion of the cyst was cut away, and the contents washed out. A saturated solution of chromic acid was then freely applied with a chromic acid carrier to several points of the cyst wall. At the end of the week, the cavity having much diminished, the acid was again applied, and in from a fortnight to three weeks the wound had healed and all signs of the tumor had disappeared. There were no bad symptoms. The seven cases of cystic goitre were in females. The tumors

were tapped in the usual manner and the contents washed out. After all hemorrhage had ceased, the saturated chromic acid solution was applied with a carrier through the canula to the walls of the cyst, in the same manner as with the ranulas. Six of the seven cases healed rapidly after from two to three applications, but the seventh and second of the series resisted for a long time all attempts, and it was not until three months had passed and some half-a-dozen applications had been made that the tumor disappeared. But neither in this nor in any of the other cases was there a bad symptom, and I attribute the length of time the last-mentioned case took to heal to the fact that there was a considerable amount of hemorrhagic oozing, which to a certain extent neutralized the action of the acid. It is therefore advisable to see that hemorrhage is, as much as possible, arrested before applying the acid. I cannot too strongly recommend this mode of treatment (first suggested by Dr. Woakes in the *Lancet* about two years ago), and though the evidence I have been able to offer is not very great—ten cases in all—still the persistent favorable results obtained are, I think, strongly in favor of a good trial being given to it, not only in the same class of cases as those I have quoted, but in every case of cyst that is inadvisable or impossible to remove. In cystic goitres it seems entirely to do away with the most dangerous part of the ordinary treatment—viz., the conversion of the cyst into a large abscess.—*W. R. H. Stewart, F.R.C.S. Edin., etc., in Lancet.*

PYÆMIA FOLLOWING SUPPURATION OF THE MIDDLE EAR ARRESTED BY LIGATURE OF THE INTERNAL JUGULAR VEIN AND CLEANING OUT THE LATERAL SINUS.—J. F., æt. 25, was kicked in the left ear when 14, foul discharge having only occasionally issued during eleven years. Pain arose in the affected ear on the 10th of August, 1891, followed four days later by daily rigors and vomiting. On the ninth day he was admitted into the Liverpool Royal Infirmary, where, in spite of antiseptic syringing, he became worse. During two days he had at least four rigors, the temperature varying between 102° and nearly 105°, a fœtid discharge issuing from the ear, and swelling and tenderness being perceived over the upper half of the site of the left jugular vein. The patient was drowsy, irritable, and at times delirious, and it was thought that septic thrombosis of the lateral sinus and jugular vein existed. On the 21st of August, 1891, eleven days after the onset of illness, the internal jugular vein was exposed for more than the upper half of its length, found firmly plugged in this extent, tied below where healthy, and cut between two ligatures; raised out of its bed and removed up to the skull along with a portion of the facial vein, similarly plugged in continuity. The lateral sinus was exposed by chiselling through the skull in the mastoid region, and found occupied with fœtid purulent material. This was scraped out and partially cleansed, the stump of vein being opened and also scraped clean. The lower part of the wound healed by first intention, the upper being plugged and dressed daily with cyanide gauze. The symptoms disappeared and continued absent for two days, when the temperature having risen again, the lateral sinus was further cleansed under chloroform, after which steady improvement went on and the patient was up and about after 16 days. He has continued well ever since, and attended a meeting of the Liverpool Medical Institution for inspection by the members on the 22nd of October, 1890. The procedure adopted was that initiated by Mr. Arbuthnot Lane in 1888, and successfully practised by him and by Mr. Ballance on several subsequent occasions.—*Med. Press and Circular.*

RANKE AND STEFFEN: INTUBATION OF LARYNX (*Rev. Mens. des Mal. de l'Enf.*, June, 1891).—Published statistics of all operations of this character which have been done in Germany show the number of cases to be 413, and of this number 364 were for primary diphtheria with laryngeal stenosis. The number of cures was one hundred and thirty-two, or thirty-six and two-tenths per cent. There were also forty-nine operations for secondary diphtheria, with nine cures—that is, eighteen and three-tenths per cent. In the first 843 operations of tracheotomy, which were performed for primary diphtheria, there were 336 cures, or thirty-nine and eight-tenths per cent. In the first twenty-three cases of tracheotomy for secondary diphtheria, there were four cures, or seventeen and three-

tenths per cent. Gay reports 327 tracheotomies from 1880 to 1886, with twenty-nine per cent. of recoveries, and 107 intubations (period not mentioned), with twenty-four per cent. of recoveries Ranke has thirty-seven and five-tenths per cent. of recoveries from 327 tracheotomies for primary diphtheria, and thirty-two and seven-tenths per cent. of recoveries from 113 intubations. *Schluck-pneumonia* and pulmonary gangrene rarely follow intubation, while lobular or croupous pneumonia is more frequent, the proportion being about the same as after tracheotomy. Necrosis of the larynx and trachea occurs with considerable frequence. The tube should always be removed at the end of ten days, and tracheotomy should be performed if laryngeal stenosis persists. In thirteen autopsies after intubation, Wiederhofer found six cases of necrosis of the larynx, and in two other cases in which intubation was performed a cicatrical process resulted which required the performance of tracheotomy. It is preferable that the tube be kept in position four or five days, as its repeated introduction irritates the larynx. In a general way intubation is more advantageous than tracheotomy, the duration of treatment being shortened, the operation being neither severe nor bloody, and the danger of cicatricial stenosis being less than after tracheotomy. Pauli has recently reported eleven cases of intubation for croup, all of which ended fatally. One great objection to intubation is the difficulty of alimentation which attends it.—*Archives of Pediatrics.*

DIPHTHERIAL INFECTION OF TRACHEOTOMY WOUNDS.—Dr. Spronk, of Utrecht, has discovered in the case of three children who had been tracheotomised for diphtheria a condition which has not hitherto been described, but which he thinks is far from rare. This consists in an inflammatory œdema of the subcutaneous and fatty tissue around the tracheotomy incision, caused by the invasion of diphtheria bacilli. He points out that in ordinary diphtheria the bacilli are confined to the epithelial surface and the false membrane, and never penetrate into even the uppermost layers of connective tissue so long as the mucous membrane is free from necrosis. Nor are the bacilli ever found in the internal organs and blood of infected individuals. Nevertheless it has been shown experimentally that these microbes can multiply in the subcutaneous tissues, especially of some animals, guinea-pigs for example. The cases he examined had died a few days after tracheotomy, and although the wound itself was free from membrane, and looked healthy, yet there was a more or less widespread diffuse œdema, without any change in the superjacent skin. This œdema was obviously inflammatory, but there was no necrosis. In two cases it occurred not only in the vicinity of the wound, round the trachea and in the intermuscular tissue, but extended for some distance over the chest and upwards to the supra-clavicular regions. He found by tube-cultures that the serum taken from different parts of the œdematous area contained abundant bacilli, which were almost as numerous at a distance from the wound as near to it. The possibility that they may have multiplied after death was slight, seeing that these organisms require a temperature of at least 20°C. to grow. Other bacterial colonies were produced from the serum, but in one case this yielded almost a pure culture of Klebs' bacilli, and the capability of these organisms to cause this type of inflammation was proved experimentally. Dr. Spronk lays especial stress on the fact that, although of course the infection takes place through the tracheotomy wound, yet its margins appeared natural. This he ascribes to the use of iodoform and the short time that elapsed between the operation and death. The importance of the discovery lies in the additional risk of the rapid absorption of the toxine produced by the bacilli when these are lodged in connective tissue.

MEDIASTINO-PERICARDITIS IN CHILDREN.—Dr. Henry Ashby puts on record (*Medical Chronicle*, Dec., 1891) two cases of mediastino-pericarditis in children, aged two years and seven years respectively. The cases illustrate strikingly the grave interference with the functions of circulation and respiration which this condition entails. Dr. Ashby points out that inflammation of the lax cellular tissue of the mediastinum may arise from inflammatory processes in the bronchial glands, lungs, or pleura, and that the pericardium is almost always implicated, either primarily or secondarily. The

consequent matting together of the important structures in these regions must necessarily seriously impair the free action of the heart, obstruct the venous flow, and diminish the arterial pulse. Hence, among the effects of mediastino-pericarditis, œdema, ascites, and chronic hepatic congestion are prominent. Clinically, the initiatory symptoms, he says, are often overlooked; there may be a history of measles or bronchitis, cough, and pain in the chest, and perhaps pericardial friction can be detected; but, as a rule, the child is first seen for ascites, for the existence of which it is difficult to account, and associated with which the liver may be found to be enlarged. In the more chronic cases cirrhosis may be suspected; but eventually general dropsy supervenes, and examination of the chest will show an increased area of dullness in the sternal region and front of the chest, provided that the anterior margins of the lungs are involved in the adhesions. The effect of deep inspiration in weakening or even obliterating the pulse, upon which stress is laid by some writers, is not always present. It was not observed in the two cases that Dr. Ashby reports. The condition is, therefore, one which may easily be overlooked; but it may be well to bear its characters in mind in the presence of cases of ascites with hepatic enlargement in young children.—*Lancet.*

ARTIFICIAL TEETH FROM A HYGIENIC POINT OF VIEW.—It is a common experience amongst dentists that a very large majority of artificial dentures worn are discolored and by no means devoid of unpleasant odor. This lack of cleanliness, which arises sometimes from neglect, but often from want of instruction on the part of the dentist as to the necessary *modus operandi*, is a fruitful cause of inflammatory conditions. Débris of food mixed with saliva and mucus accumulating on a plate rapidly undergo decomposition, with the result of irritating the mucous membrane and producing a general inflammation of the oral cavity. The oral secretions become altered and vitiated, so as to cause dyspepsia, and caries of the remaining natural teeth is set up, which proceeds with great rapidity, especially in "clasp" dentures, not from the friction, but because the inside of the clasps most generally escape the brush. The materials used in the construction of artificial dentures differ widely in their effect upon the tissues with which they come in contact. A larger number of cases of inflammation of the oral tissues occur where vulcanite is used as a basis than with gold or other metals, and so prevalent is this inflammation in the case of vulcanite that it has received the distinctive appellation of "rubber sore-mouth." Several reasons have been assigned for the effects produced by vulcanite. Nearly all this material is colored with mercuric sulphide (vermilion), which ingredient has been accused of being the cause of trouble; but an exhaustive investigation did not substantiate this view, one particular point being that "rubber sore-mouth" often occurred where black rubber was used, which contains no vermilion. The porosity of vulcanite, especially when not sufficiently vulcanized, renders it liable to retain deleterious material if not kept scrupulously clean.—*Lancet.*

CONVULSIONS TREATED BY COMPRESSION OF THE CAROTID.—Dr. Leopold Roheim, of Budapest, publishes in the *Gyogyaszat* a case of eclampsia which he had, after the failure of all ordinary remenies, successfully treated by compression of the carotid. The case, which is quoted by the *Pester Medicinisch-Chirurgische Presse*, was that of a robust man of fifty-six, who had been suffering for years from cancer of the bladder, with occasional hæmaturia. The man had been attacked by a most violent eclamptic paroxysm, which was mainly confined to the left side. Dr. Roheim prescribed in vain musk, valerianate of zinc, bromide of potassium, assafœtida, hypodermic injections of morphia, enemata of hydrate of chloral, and frictions with mustard, and at last employed compression of the carotid. After constant compression for some time of the right carotid the convulsions were suddenly arrested, the patient recovered normal respiration, and very soon felt quite well. Two or three slighter attacks followed, which were soon arrested by properly instructed attendants. The effect of the compression was so remarkable that Dr. Roheim earnestly recommends this treatment. He compressed the carotid with the index and second finger between the larynx and sterno cleido-mastoid muscle backwards towards the spine, just as Trousseau and Blaud

had recommended. He was equally successful in the case of a girl nine years old. He considers the *rationale* of the treatment to be that by compressing the carotid and at the same time necessarily the sympathetic nerve fibres, which closely follow the course of the artery, the excitability of the brain is allayed.

RAT-TAIL SUTURES.—About five years ago, while resident physician in the Presbyterian Eye and Ear Hospital, of Baltimore, I saw Dr. Chisholm use fibers from the tail of an opossum for sutures in some of his eyework. I thought such fibres a good substitute for silk, and spoke to my brother, Dr. A. M. Belt, about it. Shortly afterward a rat was caught at his residence; he had the tail skinned and soaked for several days in water, after which, upon slight manipulation, it separated into perhaps a hundred fibres, each about eight inches in length. These were placed in alcohol and presented to me, upon request, for use in eye surgery. I found the fibres strong and much finer than those of the opossum tail, or any other animal suture, and have been using them quite extensively in suturing the conjunctiva in pterygium operations, and in advancing the recti muscles in correcting strabismus. These sutures have been most satisfactory. As soon as moist they become agreeably soft to the eye, and have never to be removed, while silk sutures are rough and irritating as long as they remain in the eye, and their removal is somewhat painful. Patients from a distance are often detained five or six days to have the silk stitches removed, when rat-tail sutures might be used and the patient allowed to depart immediately. These sutures will no doubt be found useful to the general surgeon and gynecologist when they need strong and fine animal sutures. About once a month, for two or three days, I soak the fibres in a corrosive sublimate solution (1 : 5000); and as I have never had any trouble whatever from their use, I think it probable that this suffices to render them aseptic.—*E. Oliver Belt, M.D., in Medical News.*

ANTISEPSIS: PUERPERAL MORTALITY IN PARIS HOSPITALS.—Our own correspondent in Paris last week gave interesting particulars confirmatory of the immense benefits conferred on parturient women by the application of antisepsis to obstetrics. We commend the account to the careful attention of our readers. He says, out of 1340 women delivered in Prof. Tarnier's wards during the past academical year, only fourteen died, thus giving the very satisfactory mortality of 1 in 95, or 1.04 per cent. Eight years ago the mortality calculated on the same number of cases reached 2.50 per cent.; while, thirty years ago, one parturient out of eleven, or 9 per cent., died. These figures prove conclusively that modern methods of conducting labor are responsible for the saving, in his wards alone, of 100 valuable lives per annum. This is a very gratifying report of progress and advance, and perhaps our correspondent is right in thinking that the virtue of antisepsis can go no further. Puerperal fever is now unknown in the wards of M. Tarnier, whose memory goes back to a time when he witnessed five deaths in one day from puerperal peritonitis; but there is still room, perhaps, for better results if we may judge from the experience of some of our London lying-in hospitals. In one of these, during the years 1888 and 1889, there was but one death in 1272 successive deliveries.—*Lancet.*

THE BICYCLE AND OLD AGE.—The *Lancet*, in describing a military bicycling trip in which the party made one hundred miles in about ten hours, says in conclusion: The most interesting part of the narrative has still to be told. The veteran cyclist, Major Knox Holmes, at the near close of his eighty-third year, mounted on a tandem with Mr. Males, a young rider under eighteen years of age, accompanied the corps, and arrived at the termination of the expedition five minutes in advance of the rest. He was a little distressed on dismounting, from too hard riding the last few miles, but he soon threw off his fatigue and joined his companions at dinner with thorough zest. His condition is physiologically peculiar. In twelve weeks' new training he has, in the most striking manner, "developed muscle" in the external and the internal vasti, the rectus, and the muscles which form the calf of the leg. It has become so entirely a part of physiological doctrine that after threescore years and ten there is no new development of muscle that if we had not seen

with our own eyes, as we have, this actual development in one whose age exceeds by thirteen years the traditional span of human life, we should have doubted the possibility of its occurrence.—*Med. Record.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCE.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, JANUARY 16, 1892.

BACTERIOLOGY.

The treatment of tuberculous disease in the manner recommended by Koch has fallen into disfavor, but the grand work done by him, and his attempt to adapt the facts known of the physiology and chemistry of bacteria and their products to the uses of practical medicine, has initiated a vast amount of work along definite lines, which will undoubtedly be productive of valuable results. We have, even now, only a very limited amount of knowledge concerning one of the most important factors in the production of disease; the science o bacteriology is only in its infancy, and the developments which will yet be forthcoming may, and probably will, completely revolutionize our ideas concerning the etiology and pathology of many of the morbid conditions met with in our practice. It seems imperative that every medical practitioner should make himself thoroughly conversant with the advances made in this branch of medicine, and we are glad to know that an opportunity for a course in the practical study of bacteriology will be afforded the practitioners in this province, at the close of the present session, when Professor Ramsay Wright will conduct a series of demonstrations on the subject at the Biological Department of Toronto University.

Our knowledge of micro-organisms is becoming more definite and more complete. Not only is the morphology studied, but of late greater attention has been paid to the physiology of bacteria and their effect upon the living tissues of the human body. We have now to deal with hard facts when we attempt to value the influence of micro-organisms in disease; formerly, *facts* were few and *theory* prevailed. Lister, when he first introduced the antiseptic system into the practice of surgery, had discovered most important facts, but many of his deductions were, at that time, from pure theory, and this gave such practical men as James Spence an opportunity to scoff, and, by contrasting the results of the two systems, Spence attempted to prove that antiseptic methods were not called for. When, however, more knowledge was gained, and facts began to displace theory, Lister and his pupils were able to bring their methods to greater perfection, until now very few men of 'thorough education and insight dare deny the necessity for antiseptic methods. Of the opponents of the antiseptic system, Lawson Tait may be looked upon as the most influential. For some years he fought well; he is naturally a practical man and prefers fact to theory. Whilst the antiseptic system was founded chiefly on theory, Tait made a brilliant fight, but he has been driven from corner to corner, as facts have been unearthed, until now his attempts to keep above water are pitiable. He has now solid facts to deal with, and his recent attempts to combat irresistible facts are comparable to a man battering his head against a stone wall—the process will surely result in the utter annihilation of Tait, so far as his competency to judge of the merits of the use of antiseptics in surgery is concerned.

THE TORONTO GENERAL HOSPITAL.

The equipment of this institution is becoming more complete year by year. Fifteen years ago, when the demand for hospital accommodation in Toronto was not very great, the hospital was a very unpretentious institution, and consisted of a building in which patients suffering from all classes of disease, medical and surgical, were admitted. In 1878 the eye and ear infirmary was built, and in the same year the Burnside lying-in hospital. A few

years later a separate pavilion was erected for use in treating patients requiring abdominal section. Last year an important addition was made to the hospital in providing a building for gynecological work only, with ward accommodation for in-patients, and rooms for the reception and treatment of out-patients. We are glad to learn that there is at present in process of completion a number of rooms to be devoted exclusively to general out-patient work, and that here ample accommodation will be provided for both physician and surgeon, so that patients will now be able to receive treatment in apartments well adapted for the purpose. We understand that ample space will be afforded for waiting rooms, and that a limited number of students will be able to attend the out-door cliniques. It is difficult to exaggerate the importance of utilizing the material presented at the out-door clinique of a large hospital for the benefit of the student. The facilities for doing this at the Toronto General Hospital have been inadequate in the past; and whilst the conditions have been such that the students have been unable to gain much good in the out-door department, the patients, too, have suffered much inconvenience from overcrowding. The constant growth of the city, and the increasing number of medical students in our schools, demand increased facilities for hospital work, and the managers of the hospital are to be congratulated on the energy which they have displayed in providing from time to time the necessary means for carrying on the work efficiently.

There are yet certain directions in which improvement is urgently called for. The arrangements for conducting *post mortem* examinations are at present far short of what is needed. It is a very great advantage to have, in connection with a large hospital, a properly equipped theatre and a well-arranged laboratory for the examination and demonstration of morbid anatomy; this is, indeed, an absolute necessity. The present means afforded for the conduct of such examinations are far from being satisfactory; this fact is no doubt fully recognised by the authorities, and we trust that, as soon as circumstances permit, this feature, so necessary in the equipment of the institution, will receive due attention, and that our hospital will ere long rival the finest institutions of the kind on the continent. The Toronto General Hospital has at present 360 beds, and the number of patients seen in the various out-door cliniques is large.

THE INTER-CONTINENTAL (OR PAN-) AMERICAN MEDICAL CONGRESS.

In July last Dr. James F. W. Ross, of Toronto, was appointed the Executive Committeeman for British North America.

Foreign Executive Committee-men are expected to organize the profession in their respective countries in the interest of the Congress. They are asked to

(1) Nominate one vice-president for the Congress.

(2) Nominate one secretary for each section of the Congress.

(3) Appoint auxiliary committee-men in local medical societies, or in considerable towns and cities where no medical societies exist.

Dr. Ross, we are pleased to state, has his district, from the Atlantic to the Pacific, well in hand. Many of the selections have been made, and when the list is completed the names will be published. Dr. J. E. Graham, of Toronto, has been nominated for a vice-president, and he, with several others, has assisted Dr. Ross in making the Ontario selections. Drs. F. J. Shepherd and Lachapelle, of Montreal, and Ahern, of Quebec, have given valuable assistance in the Quebec selections; and Dr. Muir, of Truro, Nova Scotia, has done similar work for the Maritime Provinces. These auxiliaries are nominated for the purpose of creating an interest in the Congress among the members of the profession in each city, town, or district. To them will be sent all the official literature printed from time to time by the Committee on Permanent Organization. In his letter to those nominated Dr. Ross says: "I have endeavored to secure progressive practitioners of good standing in the profession. The Congress will be composed of members of the medical profession living in the 'western hemisphere.' It is the first time that Canadians have been asked to take an official part in any American congress of medical men."

Professor Pepper, of Philadelphia, has been elected president of the Congress, and he has never yet done anything by halves. Under his

leadership, the Pan-American Congress will be a great scientific union of professional brethren—each of them a link in a chain extending from pole to pole.

This will be the first Pan-American Congress, but its success will no doubt necessitate other similar meetings in the near future. The meeting will be held in the year of the Columbian Exhibition, 1893. Washington has been selected as the place of meeting, and the time appointed is the first Tuesday in October.

Meeting of Medical Societies.

PATHOLOGICAL SOCIETY OF TORONTO.

Nov. 28th, 1891.

The society met in the Biological Department of the University of Toronto, the president, Dr. J. E. Graham, in the chair.

Dr. J. T. Fotheringham, Toronto, was introduced as a visitor, and by request presented specimens and read a paper on a case of

CIRRHOSIS OF THE LIVER.

(See page 1, CANADIAN PRACTITIONER.)

In the discussion which followed various views were expressed as to the point of origin of the pathological changes in the organ, as to the correctness of the term "hypertrophic" in this and similar cases, and as to whether this disease is ever due to any other cause than the use of alcohol.

Dr. Graham thought that the early occurrence of jaundice in this case was remarkable, and believed that the unusual features present here might be explained by the rapid and widespread nature of the inflammatory process.

Dr. A. B. Macallum said the jaundice was caused by the early destruction of the periphery of the lobules by the new connective tissue.

Dr. Acheson thought that long continued use of phosphorus, arsenic, and other metallic irritants, would produce cirrhosis as well as alcohol.

Dr. Oldright presented the following specimens:

(1) HEMORRHAGE INTO THE PANCREAS.

I was called to see Miss H. on Monday, 5th Oct., 1891. The pain was so intense that two messages had been sent within fifteen minutes, but when I arrived, about 11.30 a.m., it had subsided. The pain was in the epigastrium. After an ordinary breakfast, the patient had eaten some ripe green grapes. She said she might have swallowed some of the skins; did not usually, but might have taken a few. I diagnosed acute dyspepsia, and left a prescription for a mixture containing morph. gr. ⅛ and some form of pepsin. I was summoned again about 1.30 p.m.; intense pain in epigastrium, extending to the back and up under the shoulder; patient had vomited a quantity of grape skins and seeds. I gave a hypodermic of morphia and tried to get the bowels moved by hydrarg. submur., Seidlitz powders, and enema of castor oil, turpentine, soap, and starch. Got a slight passage containing some solid matter, but not very satisfactory, as I had to continue anodynes. Gave, during the next 24 hours, morphia, chloral, and chloroform, essence of pepsin, bismuth, in alternations and combinations which it is not necessary to state in detail; also applied counter-irritants and hot applications. On Tuesday afternoon she appeared somewhat better. Up to this time there was no rise of temperature or pulse. On Tuesday evening the temperature rose to 101° F. and the pulse to 100; there was some tenderness on continued pressure in the lower part of the abdomen. Used opium in large doses and bags of hot hops. On Wednesday morning the pain and tenderness was much less, and there was nausea and distress. I now took advantage of the almost complete cessation of pain and tenderness to omit the opiate and get the bowels opened. Gave hydrarg. submur., Seidlitz, and enemata. The bowels were moved three times between 12 and 3 p.m. Many grape skins and seeds were passed. I was telephoned for shortly before 3 p.m., on account of a loss of power in the limbs, complete in the upper and partial in the lower. I tested sensation during the afternoon and found it impaired, more so in the right arm than in the left and the legs. I thought these symptoms due to hysteria from exhaustion, but, the case being peculiar, I asked for a consultation, and Dr. Graham saw her with me about 8 p.m. Condition about the same; pupils not affected; pulse slow, about 50; paralysis of muscles of neck; power of sphincters not affected. The patellar reflex was

not obtained, but the test could not be very satisfactorily made; no reflex gagging from tickling the fauces, no paralysis of muscles of the face or tongue; voice like that of person with very much swollen tonsils or œdema of soft palate. No albuminuria. We moved her to a larger room, and immediately after she had a severe hystero-epileptic attack, which threatened suffocation; much contortion (hysterical in appearance) of the muscles of the face, but she afterwards appeared more comfortable. We gave pot. bromide and assafœtida by mouth and rectum. Her friends desired a further consultation, and Dr. A. J. Johnson saw her with us about 11 p.m. Her pulse had risen to 120. Drs. G. and J. left about midnight, and shortly afterwards I went down stairs. I was seated a few minutes when the nurse came down to ask a question, took her answer, and went up stairs; called me immediately, and immediately I went up, and found the patient dead. A friend who was with her said an attack had come on similar to the one previously described. I should have stated that there was never any pain of head or neck, and no vomiting except of grape skins on the first day, as stated.

Dr. Graham had seen this patient four or five hours before death. She was then in bed, partly propped up by pillows, and had motor paralysis of the legs and arms, with some facial paralysis, and there was loss of sensation in one arm. She was, however, quite conscious, and apparently in distress, though her attention could be drawn off and she would then forget about her condition and apparently enjoy the conversation of those about her. He thought the paralysis must be hysterical; for a central lesion, to occasion so extensive peripheral changes, must be a pretty severe one, and consciousness would in all probability be interfered with. It was certainly an obscure case for diagnosis, and its pathology seemed equally obscure. He asked whether the hemorrhage into the pancreas was recent or not.

Dr. Cameron asked what was the cause of the hemorrhage in such cases. That point seemed to be studiously avoided in the reports. Perhaps it might be aneurism of the pancreatic artery. These are really not cases of *sudden* death, for in most cases there is a history of illness extending over several hours.

At this point further discussion was postponed till next meeting, when there will be a report on the microscopic changes in the pancreas.

(2) ACTINOMYCOSIS.

Gross and microscopic specimens from a cow's jaw were presented. The slides had been prepared by Mr. J. J. McKenzie, of the Provincial Board of Health laboratory.

(3) FIBRO-MYXOMA OF THE NASO-PHARYNX.

Gross and microscopic specimens from a boy æt. 14. The growth had been removed by the wire snare with great difficulty by Dr. McDonagh in the Toronto General Hospital. The tumor was largely dense fibrous tissue, with patches of myxomatous tissue throughout it.

Dr. Peters was present and assisted at the operation for its removal, and spoke of the almost uncontrollable hemorrhage which complicated the operation, and called attention to the very large vessels, mostly dilated veins, ramifying through the growth.

A discussion then ensued on the pathological nature of myxomata. Drs. A. B. Macallum and Acheson held that myxomatous tissue is always a degeneration product of previously existing connective tissue. The real nature of the so-called mucoid substance has not yet been fully worked out. Mucus from different sources does not contain the same chemical constituents.

The society then adjourned.

NEW YORK ACADEMY OF MEDICINE. SECTION ON ORTHOPÆDIC SURGERY.

Stated Meeting December 18th, 1891.

SAMUEL KETCH, M.D., *Chairman.*

Dr. Myers presented a case of

CONGENITAL DEFORMITIES OF THE UPPER AND LOWER EXTREMITIES,

and asked the opinion of the section as to the value of operative procedures for the relief of the constrictions caused by amniotic bands.

Dr. Kelly thought the phalanges of the great toes were perfect in this case, but that the digits had been suppressed, and development had taken place beneath the skin.

The chairman referred to a child he had seen in which there had evidently been an attempt at amputation in utero. There was a well-marked constriction just above each ankle, more marked, however, on one side. The mother of this child, quite early in pregnancy, was tripped by a cord

which some boys had tied across the street, and it was thought that this maternal impression was responsible for the deformity. The child was able to walk with the aid of ordinary ankle supports.

Dr. Townsend did not favor operating upon these constricting bands, for the resulting cicatrix would cause further contraction.

A CONSIDERATION OF SOME OF THE AFFECTIONS OF TENDON SHEATHS AND BURSÆ, AND THEIR RELATIONS TO INJURIES AND DISEASES OF THE JOINTS.

Dr. Royal Witman read a paper with the above title. He briefly described the structure and anatomical relations of bursæ and tendon sheaths, their diseases, and appropriate treatment, calling attention to the fact that chronic disease of tendon sheaths was usually tuberculous in character, for hich early removal was the only remedy.

The relation of the tendon sheaths to the ankle and wrist joints, and their liability to injury in sprains and fractures, explained the symptoms—weakness, local pain, and limitation of normal motion, often persisting after such injury.

The importance of local massage and stimulation in the early stage, in order to prevent the formation of adhesions after secondary inflammation of tendon sheaths, was urged.

In chronic and neglected sprains a careful examination should be made, and if adhesions or contractions were present treatment should be directed to a recovery of the normal range of motion. This result might often be accomplished by a forcible overstretching under ether, followed by massage and support. By such treatment, patients disabled for many months might be quickly and permanently relieved.

In conclusion, attention was called to the importance of slight injuries in childhood, which might be the starting point of tuberculous disease, the diagnostic value of chronicity, and the necessity of careful observation and early treatment in suspicious cases.

Dr. Judson said that he had seen a case of tumor of the semi-membranosus similar to the one shown in the model. The child was about six years old, and under a purely expectant treatment the tumor disappeared in the course of a few months, leaving no deformity or disability.

Dr. Townsend said that he had seen many of the cases referred to by the author, and he had been struck with the many and varied diagnosis which had been made upon them before they came to the dispensary. The diagnosis in the early stages is often difficult, especially when there is only a meagre and often misleading history such as accompanies most dispensary cases. The importance of differential diagnosis could not be too strongly emphasized, particularly as upon it depended a correct prognosis.

Dr. C. A. Powers said that he inferred from the author's remarks on injuries at the lower end of the radius that he recommended confining the flexor and extensor tendons of the fingers in the treatment of Colles' fracture. He saw a large number of these cases with functional disability following this method of treatment, and he therefore preferred to use the long anterior splint for the first five or six days, and then to shorten both the anterior and posterior splint to the first row of the carpus, directing the patient to make very active use of the fingers. Four or five days after this, he expected them to be able to shut the fingers well down into the palm.

Dr. Kelly said that in Dublin, the home and birthplace of Colles' fracture, the keel-shaped splint, which avoided injurious pressure on the thenar and hypothenar eminences, was almost universally employed. The mode of development of the bursæ, found on various points exposed to pressure is difficult to understand unless we remember that the peritoneum, which is the great areolar inter-space of the body, has had a similar development from the connective tissue structures.

He was glad that the author agreed with him as to the position of the foot, viz., slight adduction, with the foot at right-angles to the leg. This slight adduction produces what he called "artificial talipes varus."

The chairman said that he inferred from what the author said that he considered these bursal tumors of tubercular origin. He wished to dissent from this opinion, for many of them were benign, and the result of injury.

Dr. Whitman explained that he had spoken of slow chronic enlargement of the sheaths of the tendons of the wrist and hand as tubercular. The deep-seated bursæ were favorably located for tubercular inflammation, and accordingly when they underwent chronic enlargement he preferred to treat them radically. He had only incidentally referred to the treatment of Colles' fracture. He did not consider the confinement of the fingers with vigorous massage and local stimulation the same as the confinement treatment which had been criticised during the discussion.

TUBERCULAR DISEASE OF THE VERTEBRÆ IN ITS EARLY STAGES.

Dr. R. H. Sayre presented the second, third, and fourth lumbar vertebræ of a patient, showing a very early stage of tubercular disease. There was a cheesy mass in the third lumbar vertebra, which had not yet broken down and ulcerated through into the cartilage. The points of junction between the second and third, and the third and fourth vertebræ were apparently normal. There was an extravasation of blood into the vertebra. The history of the patient from whom these specimens were taken was quite interesting. A child, suffering for some time from chills and high temperature, began to have a peculiar posture and mode of locomotion, and to suffer from abdominal pains. This led to a diagnosis of spinal disease, but in a consultation with an orthopædic surgeon this opinion was not confirmed, the latter believing that the child was suffering from malaria. The symptoms not subsiding under the administratiou of quinine, the child was brought to Dr. L. A. Sayre, who concurred in the diagnosis of disease of the spine. At this time there was some psoas contraction on the right side, with spinal rigidity and very slight pains. It could hardly be said that there was a kyphosis; the lumbar spine was straight instead of concave. The child was placed in a wire cuirass. About a month later he suddenly developed a temperature of 104°, with vomiting, photophobia, phonophobia, stiffness of the neck, and a rapid pulse. He was then seen by the speaker, who found an abdominal enlargement near the left side of the umbilicus,

which could be separated by percussion from the spleen. It was quite freely movable. Small doses of bichloride of mercury were administered, and in a few days the temperature fell to 100°, and remained at this point, and the other meningeal symptoms disappeared. There was no colic indicating tubercular peritonitis. The child became now even more anæmic than before, and the abdominal swelling increased in size. It seemed hardly possible that the mass could be a psoas abscess pointing in such an unusual position. After some time the mass became larger, and moved towards the posterior surface of the abdomen. In consultation with Dr. W. T. Bull, it was decided to be inadvisable to operate. The child died six days ago, and for a few days before death there was slight jaundice. The *post mortem* examination showed that the abdominal tumor was formed by a tubercular mass which united the intestines into one large mass. There were no small miliary tubercles scattered over the peritoneum. One little band pressed upon the gall bladder, and so accounted for the jaundice. The kidneys were firmly bound down with adhesions, and the left one was very large and waxy, and its pelvis was much dilated. There was a large quantity of fluid in both plural cavities, and cheesy nodules at the apices of the lungs. The heart was enormously thickened; the brain was not examined.

The chairman thought the symptoms described were more like those of an acute non-tubercular meningitis, as in the initial stage of the tubercular variety a high temperature was usual, and the pulse was ordinarily slow or intermittent. Then, again, the subsidence of the symptoms was not in accordance with such a diagnosis.

Dr. Kelly called attention to the fact that in the early and late stages of tubercular meningitis the pulse was rapid, while in the intermediate stage it was slow.

Dr. Ridlon said that he inferred from the remark of the chairman that he shared in the general feeling in the profession that if a child survived it was proof that the meningitis was not tubercular, and *vice versa*. He desired to dissent from this opinion. Eight or nine years ago he had treated a boy who had suffered from a form of meningitis which several eminent consultants considered to be tubercular; and they had an opportunity of seeing the patient a good many times. The patient was still alive, but he did not believe this proved that the diagnosis was incorrect.

The chairman said that he had never seen one undoubted case of tubercular meningitis recover, although he believed there were a few such cases on record.

Dr. H. W. Berg was not aware that there was any symptom, either subjective or objective, which would enable one to make a diagnosis between simple and tubercular meningitis. He thought that where there was a high temperature at the beginning of a meningitis, it was due to a series of eclamptic seizures, which, by paralyzing the heat centre of the body, allowed of a sudden rise of temperature.

Dr. Townsend had had an opportunity of seeing a considerable number of cases of tubercular meningitis, almost all of which had been proved by autopsy to be tubercular, and he could not recall any case where there was an extremely high temperature at the beginning.

Dr. R. H. Sayre said that he had looked upon the meningitis as tubercular because of the very general tubercular infection. The child looked as if it would die within a few days after the onset of these meningeal symptoms, and he was much surprised when the acute symptoms subsided so rapidly. The high temperature might have been due to the abdominal lesions. The extent of the abdominal lesions was remarkable, as they were younger than the disease in the spine.

CLINICAL SOCIETY OF MARYLAND.

WM. T. WATSON, M.D., *Secretary*.

Baltimore, December 4th, 1891. The 258th regular meeting was called to order by the president, Dr. Robert Johnson.

Dr. Thomas Opie read a paper on

THIRTY-TWO UNSELECTED ABDOMINAL SECTIONS.

These cases were operated upon by Dr. Opie at the Baltimore City Hospital in the twelve months ending October 31st, 1891. The conditions for which the operations were performed were as follows: Ovarian tumors, 6; chronic ovaritis, 7; fibroid tumors, 4; pyosalpinx, 5; retroflections, with adhesions and dysmenorrhœa, 3; exploratory incisions, 3; extra-uterine pregnancy, 1; cyst of broad ligament, 1; cystic degeneration of ovary, 1. The number of deaths was four; as follows: Oophorectomy for double pyosalpinx, 1; shock from ovariotomy, 1; oophorectomy for acute mania, 1; abdominal hysterectomy for fibro-cystic tumor, 1.

Stitch abscesses occurred nine times, most frequently in cases where the drainage tube had been used. Early opening of the abdominal dressings favor their occurrence. When the dressings remained intact for seven days, there seemed to be greatest immunity from the stitch abscess. Dr. Welsh says that the staphylococcus epidermis albus is the most common cause of stitch abscesses in wounds treated aseptically and antiseptically.

Drainage was used in but three cases. In one case it retarded convalescence; in another it seemingly did no good, and a small superficial abscess at the entrance of the tube followed its withdrawal. In the third case an abscess also occurred at the site of entrance. A plentiful supply of fine properly-prepared elephant-ear sponges will do away with the necessity for flushings in most cases, and remove the need for drainage. They are efficient helps in keeping the abdomen free from infection. They can be utilized in keeping back the intestines, in occupying the cul-de-sac, in positions below the pedicle, in taking up blood or secretions, in staunching hemorrhages, in separating adhesions, in protecting the intestines while closing the abdomen.

Drainage is doing more harm than good, and ought to be abandoned by the abdominal surgeon. The oft-repeated removal of dressings of the patulous drainage tube must of necessity be a very great danger; surely it favors decomposition and invites germs. After an anæsthetic, restlessness and jactitations are not wholly restrainable, and it is easy to see how physical injury may accrue to the patient during this time from these smooth but not at all innocent glass tubes. When the laboratory physician says that bruised tissue is a paragon

field for the cultivation of germs, let us heed the warning and cast aside the drainage tube.

Dr. Parkes says as to drainage: "Views and practices concerning drainage have materially changed even since the antiseptic era began. Our predecessors drained to permit the escape of pus, which they knew would form. Until lately we have drained in order to prevent its formation. We seem now to be on the eve of an era when we need to drain but little or not at all. We resort to drainage now only of necessity in septic or infected cases. In other cases we drain mostly from habit or from fear. Indeed, when we start afresh, as it were, without previous infection, the practice of drainage is a confession of fear or of weakness, both of which are alike unscientific and unfortunate. It even seems to me that in many cases where all other aseptic requirements have been met, we do much more harm than good by the use of drains."

Dr. W. S. Thayer spoke of the treatment of

FIVE CASES OF MALARIAL FEVER

at the Johns Hopkins Hospital with methylene blue. Immediately after the appearance of the article in the *Berliner Klinische Wochenschrift* for September, 1891, in which Guttmann and Ehrlich described the successful treatment of two cases of malarial fever with methylene blue, this treatment was begun with the cases of malarial fever entering the hospital. So far only five cases have been treated.

One case of tertian ague yielded immediately to methylene blue, 0.1 five times a day. No rise of temperature after beginning of treatment; no organisms in the blood after the third day.

A severe case of quotidian ague had one chill twenty-six hours after the beginning of the treatment (methylene blue, 0.1 every fourhours), and a lesser rise of temperature without chill on the two successive days. After this the temperature was normal. No plasmodia seen after the ninth day.

In a case of chronic malaria with pigmented crescents and small intracellular hyaline bodies in the blood, no organisms were seen after the ninth day under methylene blue, 0.2 four times a day.

In two cases of severe chronic malarial remittent the temperature fell to normal in a few days, but there were occasional returns of slight fever, and the organisms—hyaline bodies and pigmented crescents—had not entirely disappeared in forty-one and twenty-three days respectively. (In the former case, after eleven days' treatment with quinine, a moderate number of organisms were still present.)

In all the cases the drug was given as a powder in capsules. Slight burning sensations with micturition were usually present after taking the drug, and were relieved by small quantities (1/5 of a teaspoonful) of powdered nutmeg several times a day. The urine, under treatment, was of a deep blue color. The fæces when passed were not colored, but on exposure to air turned rapidly blue. The sweat and saliva were not colored.

The number of cases yet treated is of course too small to give a sufficient basis for any legitimate opinion as to the relative value of this drug and quinine. The experience is sufficient to show that methylene blue has a definite curative influence on malarial fever, and to warrant its further trial.

Dr. I. E. Atkinson said that the discouragement which one nearly always finds in treating malarial diseases with other remedies than the derivatives of cinchona bark is due to the extreme usefulness of cinchona bark itself, for it is so promply antidotal in its effects in these disorders that we are apt to be discouraged, and not persist in the treatment by other agents. The testimony given to us by Dr. Thayer seems to show that in methylene blue we have another agent in the treatment of these disorders. The effects of the use of quite dissimilar drugs in these diseases is remarkable. Of course we all know the value of arsenic as an anti-malarial remedy; and we know that iodine possesses properties in this direction inferior to quinine, but still pronounced. Some years ago, prompted by some papers published by a physician connected with the English army in India, who claimed that iodine had properties equal to cinchona bark, Drs. Atkinson and Hiram Woods made some observations on the treatment of malarial intoxication with iodine. The results of these investigations showed that while iodine has undoubted anti-malarial properties, yet in a large proportion of cases it will fail absolutely. There is a wide range of remedies that possess this anti-malarial property, and which would be valuable if we did not have cinchona bark to use. The investigation reported by Dr. Thayer is mo t interesting and important, and further progress will be awaited with interest.

Therapeutic Notes.

TREATMENT OF PUERPERAL ECLAMPSIA.—In the *Journal de Médecine et de Chirurgie*, Oct. 25th, 1891, Dr. Dubost's views upon this subject are given. During the last three months of pregnancy it is absolutely necessary to examine the urine of every woman, without any exception whatever. Only in this way it is possible to meet the exigencies of albuminuria and puerperal eclampsia. The examination must be made every fortnight, regardless of the fact that there may exist no subjective or objective symptoms pointing to albuminuria. Two things are to be considered in dealing with this condition, prophylactic treatment and the treatment of the disease when confirmed. The instant albumin is detected, the patient must be treated accordingly, throughout pregnancy, during confinement, and afterward until the last trace of albumen has disappeared. A milk diet is the treatment *par excellence* of albuminuria, and constitutes equally a sovereign prophylaxis against puerperal eclampsia. Tarnier and Budin state that women put upon milk diet always escape convulsions, and other observers confirm this. This simple precaution of exclusive milk diet would eventually exclude puerperal eclamp-

sia, except in those rare instances wherein albumin precedes it by a few hours or a few days. When the convulsion declares itself, treatment depends entirely upon whether the woman is in labor or not. If not, all obstetrical methods are discarded, and only medical measures are used. Of these, preference is given to chloral and chloroform. Chloral may be considered the specific in puerperal eclampsia. There are several ways to administer it, though not all are equally favorable. Large doses by the mouth produce serious irritation of the gastric mucous membrane, and at the same time are but slowly absorbed. Hypodermic injections are also objectionable. The best method of administering chloral is by the rectum, in the following form of enema :

Chloral hydrate - -	4 grammes.
Milk - - - - -	100 grammes.
Yolk of one egg.	

This enema must be given with great care and precaution, for the patient is often in much motion. A syringe used for hydrocele is the one to employ, the extremity capped with a soft rubber sound of eighteen or twenty calibre. This is anointed with borated glycerine and introduced high into the rectum, and the enema gently given. In this way danger of injuring or perforating the rectum is averted. The injection is rarely expelled. If it is, it must be administered in the same way a second time. This rectal injection should always be given when, at the commencement of labor, there is agitation, restlessness, frontal headache, difficulty of vision, or pain in the epigastrium. It will often avert an eclamptic attack. If, at the end of three hours, the seizure continues and the temperature remains high, another enema may be given, containing, as before, four grammes of chloral. As many as fourteen, sixteen, or even eighteen grammes may be given in twenty-four hours. The milk and egg render the drug less irritating, and these large doses are well supported. Chloroform is the next best agent in eclampsia. It is a powerful remedy, to be used while waiting for the action of chloral whenever a woman is in an eclamptic seizure. Often chloroform will ward off an attack that is imminent, and should be given on a handkerchief whenever such a catastrophe is suspected. Inhalations must be kept up until there is complete muscular relaxation. It is well borne, and may be used when necessary for several hours, even for twenty-four hours, to keep the body in a state of relaxation. Because there have been no accidents is no excuse for neglect of any and every precaution. The physician should never leave the bedside of an eclamptic patient for any pretext whatever. The patient should be isolated in a warm room, far from noise or shock, and kept in half darkness. Every movement and examination should be avoided as far as possible, for even a touch may suffice to bring on an attack. It is necessary to sit by the bed to keep the woman covered and prevent her from falling out. If she strikes or attempts to do herself harm, the hands must be held by persons in attendance. Tying the woman, or putting on a strait-jacket, impedes respiration and is a source of great danger. To prevent biting the tongue, a thick wad of rolled linen may hold it back of the dental arches. Wood or metal thus introduced may break the teeth. Drinks should not be given in porcelain or glass that easily breaks and thus becomes a cause of serious injury, but from a tin nursing-bottle. The attack once passed, the dose of chloral in the enemas is reduced, and these are decreased in number. Four grammes of chloral a day are soon sufficient. Purgatives, even drastics, or purgative enemata, every two or three days until convalescence is established. During labor, when there is a convulsion, these same precautions and rules are to be followed. But vaginal examinations are essential, for there is nothing to tell how matters are progressing except the touch, and the child may be born and smothered. Particular care must be given to the perineum, which is weak in all albuminurics and specially liable to great damage. When dilatation is complete, and not an instant before, the child must be delivered rapidly by the forceps. Naphthol may be used as an antiseptic. The perineum must always receive special attention, and the physician must be constantly on his guard against hemorrhage. Never consider a woman cured because puerperal convulsions are over. They may return at any moment. The urine must be examined daily and milk diet kept up until albumin has entirely disappeared.—*Med. Record.*

ICHTHYOL VARNISH.—Unna (*Monatsheft fur prakt. Derm.*, and *Boston Med. and Surg. Journal*), who has made extensive use of ichthyol in the form of ointments, pastes, ichthyol-collodion and ichthyol-gelatine, recognized the need of an ichthyol varnish that would not have the disadvantages of the collodion and gelatine in being somewhat irritating to an abraded skin, and that would not possess the hygroscopic qualities of the pure drug. He believes that a good many specialists have been less successful in the treatment of rosacea and lupus erythematosus with ichthyol because they have used the drug in the form of ointments and pastes.

For this purpose he experimented with various substances, and found that if starch were added to ichthyol the mixture was not hygroscopic, and that to this mixture albumen must be added in order to keep the starch in suspension. The formula for this ichthyol varnish reads:

Ichthyol,	40 parts
Starch,	40 "
Sol. albumen,	1-1½ "
Water, ad.,	100 "

The starch is first thoroughly mixed with the water, then the ichthyol added, and lastly the solution of albumen. Another formula, in which carbolic acid is incorporated, is:

Ichthyol,	25 parts
Carbolic acid,	2.5 "
Starch,	50 "
Water,	22.5 "

This varnish is intended especially as a dressing in minor surgery, as it dries quickly, and can easily be removed by water. The soluble ichthyol varnish combines all the advantages of the various ichthyol preparations without their disadvantages. It dries quickly and is not dissolved by the perspiration. It is valuable in acne in persons with a very sensitive skin, in rosacea, and in lupus erythematosus. In some forms of eczema and in erysipelas it is of great service.

This varnish is also made the vehicle for other drugs. For example, 2 to 5 per cent. of chrysarobin may be added to the ichthyol varnish for use upon the face. Certain circumscribed forms of eczema, psoriasis, and other affections may be treated by combining pyrogallol, resorcin, and sulphur with the ichthyol varnish. It is to be noted that, in order to obtain a suitable consistency, an amount of water or oil equal to that of every new medicament added should be mixed with the varnish. For this purpose linseed oil is used, as a rule.—*College and Clinical Record.—Lancet-Clinic.*

PARISOT, in the *Bulletin Gén. de Therap.* for Sept. 15th, 1891, highly commends, in diphtheria, irrigations of salicylic acid (1-1000), and affirms that whereas before resorting to this method the mortality in his practice was large—ten cases out of every fourteen—in a recent epidemic in which he has relied on the irrigations, there were only five fatal cases out of every twenty-four. The formula which this writer employs is as follows:

R.—Acid. salicylic	1 gm.
Water	980 gms.
Alcohol (90%)	20 gms.—M.

Dissolve the salicylic acid in the alcohol, and add the water. The apparatus which he uses is simply a fountain syringe with the "fountain" of tin; this fountain is hung on the wall over the patient; the rubber tubing which is connected with the lower extremity of the fountain ends in a small glass tube tapering at the point like a dropping-tube. A spring "catch" on some part of the tubing interrupts the current of liquid at will. When the fountain is charged with the solution and ready for action, the head of the child is held by an assistant, the tongue depressed, and the jet directed into the mouth and posterior pharynx with sufficient force to detach and remove the false membranes, if they happen to be loose. Parisot likes best the position in which the child is held with the head forward and a little downward. Where the child is very feeble, it may be supported upon the arm of the assistant, with the face turned toward the floor. In this position it may be more difficult to perform the irrigations, but there is more certainty that the liquid will flow back again, and not be swallowed in any quantity. The quantity of the liquid to be used in each irrigation may not amount to more than three or four ounces, but in grave cases the oftener the irrigation is practised the better. The use of the irrigations does not make unnecessary other re-

medial measures, such as the frequent administration of stimulants. Parisot makes some remarks as to the action of salicylic acid on false membranes which, if true, are of great practical importance: In distilled water, the false membrane was simply disaggregated, and this disaggregation took place slowly, while in solutions of different strengths of salicylic acid the exudate disappeared rapidly; at the end of a few minutes nothing was found but the meshes of the network serving for support to the cells of the exudation. The stronger the solution of salicylic acid, the more prompt and complete was the disappearance of the exudate. Parisot has, moreover, noticed that in diphtheritic throats that have been irrigated with the salicylic solutions, false membranes, when once detached, are reproduced more slowly and imperfectly than when the throat is cleared by any other process; he hence concludes that the mucous membrane is favorably modified by the salicylic acid.—*College and Clinical Record.*

TREATMENT OF BRONCHO-PNEUMONIA IN CHILDREN WITH HYPODERMIC INJECTIONS OF MURIATE OF QUININE (St. Philippe, *Jour. de Méd.*, June 21st, 1891).—It is necessary to differentiate carefully between pneumonia complicated with entiritis and typhoid fever, between central pneumonia and the prolonged variety which is suggestive of tuberculosis. There are two indications for treatment: one due to a constant element, bronchitis; the other to an occasional element, the pulmonary lesion. The latter is by far the more important, for the existing congestion may be sudden, extensive, and so interfere with hæmatosis as to cause death in a few hours. Quinine acts upon the congestive element whether administered by the mouth, the rectum, or subcutaneously. Sulphate of quinine may be given in black coffee or with extract of licorice. With small and unruly children, one must administer it by rectum or endermically. Such methods are slow in action and unreliable. It is far better to use it hypodermically, employing the following formula:

℞.—Quin. mur., 2 to 4 grammes;
Glycerinæ;
Aquæ, aa, 10 grammes.

Sig.—One or two syringefuls may be injected, according to the requirements.

Blisters may also be used with advantage, being applied over the region where rales are abundant. Should suffocative catarrh occur, one must use sinapisms, large fly-blisters, scarification, or leeches, according to the age of the child. As supplementary medication, one may give five to twenty drops of the tincture of aconite-root in the course of the twenty-four hours, or one or two drops every hour, combining it with compound syrup of ipecac if the bronchitis is severe, or with syrup of quinquina or punch if the general condition is bad. To calm the excitement, warm baths and a little antipyrin may be used; but opium is inadvisable. If the cough is paroxysmal, fumigations should be used. In very severe cases, quinine and aconite should give place to subcutaneous injections of caffeine, to digitalis, and alcohol. Inhalations of oxygen are to be preferred to inhalations of ether.—*Archives of Pediatrics.*

THE method of raising children in bran was proposed by M. Pue at the *Société Normande d'Hygiène Pratique* (quoted in *Arch. of Pediat.*). It consists of a cradle which has the wooden bottom taken out, and is then lined with a strong cloth. In this is placed sterilized bran to nearly half a yard in depth. A hair pillow is used. The baby has only a short flannel shirt on, and is naked from the navel downward. It is covered with a woollen blanket, and a wool-lined dress is kept to put it in when taken up for nursing. It has thus full liberty of movement in all its limbs, while its dejections pass at once into the pure bran, keeping the child dry and clean even if there is diarrhœa. This method is a cheap one, the bran not costing as much as diapers. *College and Clinical Record.*

A CLAIM THAT INFLUENZA IS CONTAGIOUS.—In his interesting work on "Epidemic Influenza," Dr. Richard Sisley claims that the cause of the disease is probably a microscopic organism, that it is contagious, and is chiefly, if not entirely, spread by contagion. In proof of his theory of contagion, he cites cases that show that influenza spreads from the sick to the sound; that isolated cases of influenza precede an epidemic; that influenza spreads along the lines of human intercourse; that prisoners and other isolated persons often escape influenza, although

the disease may be raging in the town in which the prison is situated. He claims that the local health board should be notified of cases of influenza just the same as in cases of scarlet fever or diphtheria, and that laws should be passed making such notification compulsory.—*Medical Record.*

IN the clinic, for a case of *chronic Bright's disease*, in a woman aged fifty years, in which the prognosis was unfavorable, Prof. DaCosta gave, as palliative treatment: *To control the waste of albumin*, one drop of nitro-glycerin, one per cent. solution, and increased to gtt. v, three times daily. *For the anæmia:* Ferri sulphas, 3 grains three times daily in pill. The diet to be as nearly as possible of milk, skimmed milk preferable on account of the disturbed state of her digestion. Patient might have green vegetables, fruit, fish, and oysters; the indication being to guard against nitrogenous foods.—*College and Clinical Record.*

MENTHOL FOR CHAPPED HANDS.—The following is recommended in the *Journal des Maladies Cutanées et Syphilitiques:*

℞.—Menthol	. . .	0.75
Salol	. . . .	1.50
Olei olivar	. . .	1.50
Lanolini	. . .	45.00

M.

Sig.—Apply once or twice daily.

The pain disappears after the first application, the skin is softened, and the fissures disappear very shortly. It is necessary, however, to continue the applications regularly for some time.—*St. Louis Med. and Surg. Jour.*

FOR FŒTID BREATH.—The following is recommended in the *Revue Générale de Clinique et de Thérapeutique* for the above:

℞.—Saccharin,		
Acid. salicylic.		
Natri bicarbonate, aa	.	gr. xv.
Alcoholis	. . .	℥j.
Ol. menth. pip	. .	gtt. x.

M.

Sig.—A teaspoonful in a wine-glassful of warm water, to be used as a gargle once or twice daily. —*St. Louis Med. and Surg. Jour.*

M. FAY, in the *Wiener Med. Blatter*, praises the beneficent action of sodium salicylate in the treatment of nephritic colic. He declares that under its influence the calculi are rapidly eliminated and the patients restored to health. If *true*, this is indeed a boon to suffering humanity, as few tortures are so acute as those of renal colic, and none have hitherto been more rebellious to treatment. Sodium salicylate has also been highly recommended in hepatic colic.—*Med. and Surg. Rep.*

THE following is recommended by a French writer as very efficacious in the relief of chronic prostatitis:

℞.—Iodoform	. .	gr. xx.
Olive-oil	. . .	℥ij.
Cocoa butter	. .	q. s.

Divide into twenty suppositories, one to be inserted at bedtime.—*N. Y. Med. Record.*—*Cincinnati Lancet Clinic.*

MALE-FERN is not an entirely harmless remedy, though long in use, and one of the best of anthelmintics. Dr. Eich does not favor the usual method of giving the drug fasting, since when the stomach is empty the absorption of the toxic principles into the general system is facilitated and poisonous symptoms may occur. Several fatal cases of poisoning are reported. The ethereal extract contains poisons which act upon the central nervous system, a tetano toxine or tetanus-producing body playing an important role. The dose of ten grains or two and a half drachms should not be exceeded.—*Med. Record.*

ANTIPYRIN ASTHENOPIA.—A writer in *The Lancet* relates a case of impairment of vision for distant objects coming on rather suddenly in a man, æt. 32, who had been using antipyrin pretty steadily for several months. The writer is inclined to put the blame for the impaired vision upon the antipyrin, and asks if any others have seen a similar effect from the use of the drug for long periods.

PHOTOPHOBIA, with dilatation of the pupil, is said by Huguin to be an early diagnostic sign in pertussis before the whooping stage comes on.

Miscellaneous.

A LAW FOR THE PREVENTION OF BLINDNESS.—Following the example of the State of New York, the State of Maine has passed the following law, which was approved by the Governor on March 28: "Section 1. Should one or both eyes of an infant become reddened or inflamed at any time within four weeks after its birth, it shall be the duty of the midwife, nurse, or person having charge of said infant to report the condition of the eyes at once to some legally qualified practitioner of medicine of the city, town, or district in which the parents of the child reside. Section 2. Any failure to comply with the provisions of this act shall be punishable by a fine not to exceed $100, or imprisonment not to exceed six months, or both. Section 3. This act shall take effect on the first day of June, eighteen hundred and ninety-one."—*New Orleans Medical and Surgical Journal.*

MORTALITY IN ENGLAND AND FRANCE.—Two hundred years ago the mortality in England was 80 in the 1,000, and fifty years ago 25 per 1,000, while in 1889 it had fallen to 17.85. This result is the more remarkable since the birth rate is so large, and it is well known that a large birth rate increases the annual death coefficient. In France the mortuary rate, which at the beginning of the century was 28, is to-day 22.29, but the coefficient of births has fallen from 30 to 25 per 1,000. If the births in France were in the same proportion as those in England, the increased death rate over this country would be still greater.—*Journal de Mèdicine de Paris.*

A SAD MISTAKE.—A writer in the *Hospitals Gazette* quotes the following story, said to have been related by Sir Richard Quain, M.D., which perhaps points a moral. He was attending the wife of an old patient, and at one of his visits the husband set him thinking by saying to the doctor, "I greatly appreciate the anxiety you feel for my poor wife, but do not let her see it again, for after you left the room she asked if you were the undertaker." As Dr. Quain rather prided himself on having a good bedside manner, he felt that he was being taken down a peg or two.—*Med. Record.*

The Medical News' visiting list for 1892, arranged for thirty patients per week and published by Lea Brothers, of Philadelphia, will be found to be one of the best of its kind. A special index facilitates speedy reference. Besides the usual tables of doses, incompatibles, poisons, and antidotes, it contains directions for examination of urine, ligation of arteries, and a brief résume of the accepted treatment of the diseases most often met with.

MRS. C. P. HUNTINGTON has given the Directors of the Post-Graduate Medical School of New York city $2000, a sum sufficient to derfray the expenses of the lying-in department for one year. Professor Von Ramdohr will have charge of this department, at 543 East 13th Street, where instruction in obstetrics will be given to graduates in medicine only.

MATTHEWS DUNCAN MEMORIAL.—At the last meeting of the Aberdeen University Court, a letter was submitted from Professors Alex. Ogston and R. W. Reid, formally handing over to the court a bust of the late Dr. Matthews Duncan, to be placed in the Medical School, and a cheque for £140 to be invested to provide a gold medal to be known as the "Matthews Duncan Gold Medal in Obstetrics."—*Brit. Med. Jour.*

THE University of Lemberg is about to be blessed with a medical faculty, the Emperor of Austria having approved of the proposal to establish one. It is thought it will be ready and in good working order by the autumn of 1894. Well, we should hope so! Oklahoma will have two or three medical colleges in full blast by that time.—*Medical Record.*

A SUCCESSFUL case of bone-grafting is reported from Allahabad, a solution of continuity in the anterior layer of the frontal sinus having been induced to take on osseous repair by sprinkling the surface with "small fragments" of the hip-bone of a newly killed dog.—*Med. Press.*

THE annual dinner of the Medical Faculty of the Western University was held in the Tecumseth House, London, December 22nd.

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ROTO-LATERAL CURVATURE OF THE SPINE.*

BY B. E. M'KENZIE, B.A., M.D., TORONTO.

There are few affections in which the aid of the surgeon is sought that yield less satisfactory results in treatment than roto-lateral deviations of the vertebral column. To the family physician each case is a standing rebuke; drugs have but a narrow sphere of usefulness; time—that so frequently comes to our aid renders the case worse; mechanical appliances prove themselves hurtful rather than helpful in the majority of cases; for treatment by exercise much individual attention is required, coupled with a careful study of each case and a considerable knowledge of gymnastics. Now, as when Edward Harrison† wrote, early in this century, "these cases have hitherto been intractable enough to deserve to be ranked among the *approbria medicorum*."

Little advance has been made in the pathology and treatment of this affection since Percival Pott‡ so graphically distinguished from other affections the disease since recognized as Pott's disease. The clinical pictures drawn by John Shaw,§ James Wilson,‖ and others, early in this century, are equal to any that have been given in later times.

Curvature of the spine is much more common in girls than in boys, in the proportion of more than five to one. More than half of the cases develop before the tenth year, and congenital cases have been described. Usually the attention of the mother is first attracted by the condition of the shoulders or breasts. It is a common expression that "one of the shoulders is growing out," or that "one of the breast bones is out of its place." Occasionally attention is first called to the fact that "one hip is farther out than the other."

For purposes of clinical description, we here refer to two classes of cases, which differ in degree rather than in kind: First, those cases in which the deformity is slight and comparatively recent; secondly, those in which the deformity is more strongly marked, is of longer standing, is accompanied by deformity in the individual vertebræ, and by rotation.

When advice is sought in the first class of cases, it is usual for the mother to refer to a lack of symmetry of the shoulder blades, or to the fact that the ilio-costal space is deeper on one side than on the other. Any slight deviation of the spine from the perpendicular is likely to have escaped notice. Sometimes the distortion is first noticed by the dressmaker, who complains that it is impossible to make a rightly-fitting garment. The most noticeable curve, that in the dorsal region, is, in the vast majority of cases, towards the right. In such cases the

*Read before the Toronto Medical Society.

†Spinal Diseases, by Edward Harrison, 1827; preface.

‡Chirurgical Works of Percival Pott, Esq., vol. iii., pp. 427-493.

§John Shaw, "Nature and Treatment of the Distortions of the Spine," 1823.

‖James Wilson, "Lectures on the Structure and Physiology of Parts Composing the Skeleton, and on Diseases of Bones and Joints," 1820.

right shoulder blade is displaced upward and outward, and is rotated about a transverse axis, so that its lower angle projects backward more than that of the left. Measured from the spinous processes between the scapulæ, the lower angle of the right is farther away than that of the left. If the tips of the processes be followed downward and marked by a colored pencil, the parent's attention is, probably for the first time, called to the fact that there is a deviation from the perpendicular. In cases where there is but little deviation, no rotation of the vertebræ may be found; yet in comparatively slight cases careful examination will reveal a more pronounced roundness on that side of the spine next to the convexity. This is rendered more noticeable by having the patient curve the whole spine forward as much as possible, at the same time allowing the arms to hang loosely. Inspection in this attitude reveals even a very slight degree of rotation. The greater prominence on the side of the back next to the convexity of the curve is due to the vertebræ having rotated upon a vertical axis, so that the anterior portion of the body has made the greatest departure from the vertical. It follows from this that the actual curvature to the right or left in the bodies of the vertebræ is greater than is apparent by examination of the spinous processes, and that the transverse processes upon the side of the convexity are more posterior than those at the concavity of the curve. The first portion of each rib on the side of the convexity following the direction of the transverse processes is directed more backward than in the normal condition, while those on the side of the concavity, also following the direction indicated by the transverse processes, are less prominent than in the normal state. Following the ribs on the side of the convexity, their angles are found to be much more acute than the normal, and towards the anterior part the natural curve is lessened so that the front of the chest on that side is flattened. The ribs on the side of the concavity are correspondingly flattened behind and their curvature increased in front. The curve thus described is probably nearly always secondary to a curve in the opposite direction in the lumbar region, and is frequently accompanied by a third curve in the cervical vertebræ.

Many different causes have been assigned for the deviations from the perpendicular.* The normal spine of the infant is a right line, and is capable naturally of bending in all directions. At a very early date a natural curve forward is found in the lumbar region, probably caused by a traction of the psoas muscles in the use of the lower extremities; this is naturally accompanied by a compensatory curve backwards in the dorsal region. The normal spine, when bent to the right or left, will permit a certain amount of flexion without rotation of the vertebræ around their vertical axes. Beyond this limit, however, rotation occurs as described above. Some causes which certainly are productive of this deformity may be enumerated.

Rickets, and all conditions of malnutrition of the child, render not only the bones, but all the tissues which go to constitute the spine and to hold it erect, less capable of maintaining the erect attitude, and constitute the chief predisposing causes. The force of gravity, operating through the necessity that the spine should bear the superincumbent weight of the thorax and its organs, the shoulders, arms, and head, tends to overcome the power of the spine to maintain its erect position. Any cause which even temporarily draws the spine away from its normal position enables this superincumbent weight to act with increased force in causing further deviation.

So long as a column of bones, such as the vertebræ, remain in a vertical plane, a great pressure from above may be resisted. This ideal condition, however, never exists; in the first place, the natural antero-posterior curves interfere with this ideal; and, secondly, in development few, if any, persons would be found entirely symmetrical if a vertical plane were passed from behind forwards through the centre of the body. Thus certain predisposing causes are supplied.

It is interesting to note some of the causes why this affection is so much more common in girls than in boys. Other reasons probably assist in bringing this result about; but I am of the opinion that the chief causes are, first, that the girls are not allowed such freedom in exercise and outdoor life as boys are, and, second, that the clothing employed by girls produces an unnatural constriction of the lower part of

*"The Spine in Infancy," Dwight & Rotch, *Archiv. Pediatrics*, March, 1891.

the thorax. Women in uncivilized nations have larger waist measurements proportionately than men, while the opposite is the case in civilized communities. In this way not only the muscles of the back are lessened in size and power, but the base of the thorax is so constricted that its mechanical power to aid in keeping the body erect is greatly lessened.

Chest diseases, such as empyema, which leave one lung in a permanently disabled condition, cause a very severe form of curvature, which is not amenable to treatment.

Seeing that the absolutely erect spine is but an ideal, not a reality, weakness renders slight causes operative in drawing the spine away from its position. The most frequent causes thus operating are found in the habits of children, such as throwing the weight entirely upon one leg when standing, sitting at the desk with one shoulder in advance of the other, etc. In fact, any attitude which is frequently assumed grows into a habit, and various tissue changes follow as a consequence upon the incorrect position maintained. Thus, if the weight of the body be thrown entirely upon the right leg, the left side of the pelvis is allowed to droop, the upper surface of the sacrum is in an oblique position, sloping downward to the left, and the axis of the lower vertebræ is directed towards the left side, thus causing a left lumbar curve, which must be compensated for by a curve toward the right, higher up, in order that equilibrium may be maintained. This position can be taken without causing any permanent change in the structures making up the spine, but if habitually assumed the intervertebral substances and the sides of the vertebræ upon the concave side become lessened by the greater pressure, and the parts on the sides of the convexity are permitted to increase in thickness. The muscles, also, and ligaments, intervertebral and others, upon the concave side, become shortened, the rotation which is normally produced in lateral bending is maintained, and thus permanent organic changes result. Another cause that is occasionally operative is found in the difference of length of the extremities, by which a tilting of the pelvis is produced, the base of the sacrum brought into an oblique position, and, consequently, the axis of the spine deflected from the perpendicular.

The slighter cases above referred to may generally be corrected by an effort of the patient, under the instruction of the surgeon. Where organic changes have not taken place, deviations considerable in extent may entirely disappear when a well-directed effort on the part of the patient is made to bring the pelvis to a level and the spine into the vertical plane. This is a most important circumstance to be noted in reference to treatment. It may be laid down as an axiom that the patient who can thus assume a correct position, even for a short time, may be educated into maintaining that position as a habit. Such cases form a class that are more amenable to treatment than any others. A second class consists of those who are able by an effort to lessen the degree of deformity; such patients may learn to hold permanently this amount of correction and to gain even further improvements. There is a third class who are unable by any effort of their own to produce any betterment in the distortion.

It is of course of the greatest importance that the general health of the patient should be looked after, and such constitutional treatment given as may be required.

Patients coming in the first class are better treated by the aid of systematic gymnastics, electricity, massage, etc. The second class, I believe, is best treated solely in the same way; but the third class can be helped only by various mechanical means of treatment.

No brief description can satisfy in giving an account of the systematic exercises* best adapted for the correction or improvement of these cases. It would be as unwise to treat all cases by the same exercises as it would be to treat all diseases by the same means. The habits in standing and in sitting, and in other attitudes, should be carefully studied, and everything tending to produce asymmetry should be avoided. The patient, unclothed down to the level of the trochanters, should be carefully instructed by the surgeon to assume an attitude that is the nearest approach possible to erectness; if necessary, one side of the pelvis should be raised by increasing the thickness of the sole of the shoe, so that the base of the sacrum may not tilt to either side. While the patient thus

*Heath's Dictionary of Surgery. "Roto-Latera Curvature of the Spine," Bernard Roth. *N.Y. Med. Rec.* Reginald Sayre, M.D.

maintains the best position possible, a variety of gymnastic exercises should be performed, cultivating such groups of muscles as the surgeon finds most called into use in bringing about this degree of correction. It is most important that this test position should be maintained. When weariness makes it difficult for the patient to maintain this corrected position, the exercises should cease and rest be permitted. The patient never feels at ease in this corrected attitude; the senses have become habituated to the position of deformity, and a restful feeling exists only when the deformed attitude is permitted. Consequently a re-education of the senses becomes a necessity, and the exact or corrected posture assumed by effort must become the *habit of life*. An important aid in bringing about this result is obtained by permitting the patient to exercise before a large mirror, maintaining at all times the best corrected position possible.

While electricity and massage may be general in their application, they should be given especially to the muscles and other tissues of the back and trunk.

In the use of all forms of portable mechanical appliances, the principle employed in the use of the plaster jacket is the best. By means of a suspensory attachment to the head, the spine is extended according to the judgment of the surgeon. This lessens to a greater or less degree the amount of deformity, and in this position the plaster jacket is applied, embracing the pelvis below and the thorax above. Thus the jacket becomes a double cone, and tends to maintain the body in its improved position. The disadvantages attendant upon the use of gypsum may be overcome by substituting for it the leather corset here shown, or the wooden corset made by Phelps, or other substitutes that have been employed for this purpose. Any portable appliance acting on a different principle, such as that with crutches in the axillæ, are worse than useless. A crutch under the movable shoulder can accomplish nothing in helping the patient to maintain a better position.

Against all such mechanical appliances it may be objected that they constrain the muscles of the trunk, producing atrophy and weakness, whereas increased strength is called for. This objection makes treatment by their use in the first two classes unwarrantable; coming in the third class, however, are individuals who cannot work or be comfortable without some aid to support the body; in such cases these appliances are commendable.

Other mechanical means there are which may be employed with advantage where there is any permanent deformity. The inclined plane, having an attachment by which extension is made at the head while the body makes counter-extension, may be employed advantageously several hours a day and thus be made to alternate with the treatment above mentioned.

The difficulties that lie in the way of the surgeon in treating patients by gymnastics are so great as to be almost discouraging. One might as well prescribe for a patient so many pages of Hebrew or Greek and expect her to return regularly with the work accomplished as prescribe a series of gymnastic exercises and expect them to be followed out in the manner above described without a competent instructor to direct and accompany. I know of no plan by which this can be successfully carried out except by a regularly trained gymnast.

IS DIPHTHERIA OF LOCAL ORIGIN?

BY J. S. BENSON, M.R.C.S. ENG., CHATHAM, N.B.

During the prevalence of any epidemic so fatal in its effects as diphtheria, it is natural—nay, imperative—in the interests of his patients that every practitioner should carefully scrutinize every journal, consult every authority at his command, and exchange ideas with his professional confreres, in search of such remedies from which he may select and use those he may consider the most beneficial to each individual case. The tendency in most journals and standard works at the present day seems to be the acceptance that diphtheria is of local origin, and therefore the remedies must be chiefly local also, attacking the exudation vigorously with every conceivable kind of gargle, spray, and powder, with a view to destroy the local affection and thereby prevent systemic infection. Now, it may appear presumptuous in some to oppose the views of such men as Brettoneau, Oertel, Jacobi, Mackenzie, Bartholow, and numerous others equally famous. Still, it is the privilege of each one to accept or reject this or

that theory of disease as his ideas or common sense dictate.

I, for one, therefore, would like to ask a few questions, requesting explanation concerning certain facts in connection with diphtheria of those who claim that it is a disease of local origin.

How do they account for that period of incubation which precedes local manifestation? Incubation, as applied to disease, I understand to mean "that period which elapses between the introduction or entrance of a poison or morbific element into the system and the manifestation of certain symptoms produced by that poison whereby we may or can pronounce exactly what disease exists." During this period of incubation, then, which lasts from a few hours to a few days, varying in time in different cases, we find our patient complaining of headache, weariness, pains in back and limbs, high temperature and rapid pulse, loss of appetite, and furred tongue. Next we have intense hyperæmia of the mucous membrane covering fauces, particularly the tonsils; and, lastly, we observe the exudation. Is this the order in which the symptoms should occur if the disease was produced by local infection first? What poison produced the symptoms accompanying that period of incubation? Was it not the very poison that produced the local appearance in the throat afterwards?

If local infection be accepted as the correct theory, then we must abandon the idea of any prodromal stage or incubation entirely or reverse the order in which the symptoms occur. Some authorities tell us some cases are constitutional, while others are of local origin. What are we to understand by this statement? Is it that, in cases where local manifestations are observed early, they think they have discovered the point of inoculation and designate such a case of local origin, whereas in those in which a period of incubation precedes the local affection and they cannot find or discover any point where the poison deposited itself, they say such cases must be constitutional? Take a case of small-pox. Are we to say that a case which has been produced by the entrance of the poisonous germ into the blood at some spot not visible is constitutional, and another that has been produced by intentional inoculation of local origin? Are not both constitutional? And do we not accept or recognize in the appearance of the pustule produced by either inoculation in small-pox, or even vaccination, an evidence of systemic infection?

If the idea of local origin with subsequent contamination of the general circulation is correct, why, certainly, the entire and complete removal of the cause should prevent effects; hence, the proper and only sensible treatment, in accordance with such a theory, would be curetting or scraping off the exudation, penetrating well into the healthy structures. Supposing this were done, what is the result? Why, an immediate reforming of membrane. Now, from whence comes this new exudation? Certainly it is not produced by the old, because that has been entirely removed. It is undoubtedly produced by the same cause as the first one was, namely: The blood deposits it there, as the part selected in that disease, exactly in the same manner as small-pox, chicken-pox, measles, and scarlet fever select the cutaneous surface and produce the changes observed there.

Do the disciples of the local-origin theory advise the removal of what they say is the cause of the disease, the exudation? No; I think all with one accord say, No, do not disturb it. The practice and suggestions of many physicians are greatly at variance (I think) with the ideas they have put forth. For instance, Dr. Seibert, of New York, has invented an instrument (and a very ingenious one) for making submembranous injections, using chlorine water as the liquid. Now, what is the effect of this apparently simple operation? The fluid which is injected is at once carried away by the circulating blood and absorbents, and a puncture, representing the entrance of each of the half-dozen needles, remains. Is not each of these half-dozen punctures a separate opening for infection? I must note another peculiarity in his treatment, which is this: Dr. S. says a child may be disturbed frequently during the day and allowed to sleep six or seven hours at night. What guard does he leave in charge of the portals to the circulation during these hours of repose? Does he mean to say that the fluid he injects at night will remain in the tissues, actively working, during these six or seven hours? Or are we to believe that the diphtheritic bacilli

only migrate in daytime and rest calmly and serenely in the membrane during the night season?

Another plea for constitutional origin is this: Do we not find that, after elimination of the poison at any given point commences (as on tonsils), the symptoms of incubation subside, the temperature falls, the pulse becomes slower and remains so until convalescence is established, unless again disturbed by blood poisoning, which is ushered in by its own particular train of symptoms.

I must apologize for taking up so much space. My remarks may, however, call forth explanations for some phenomena which I cannot harmonize with the local infection ideas. My opinion is that diphtheria is a distinct, acute, infectious disease, produced by certain bacilli or germs which gain access into the blood by some invisible channel through the respiratory or alimentary tracts, which in their turn give rise to special symptoms, and select for their elimination and local manifestation the mucous membranes of fauces, especially the tonsils, and in some cases including the laryngeal and bronchial membranes—on all of which they deposit in form of an exudation in varying degrees of intensity and thickness, exactly in the same manner as the various exanthemata select the skin, occasionally involving the mucous surfaces as well.

I cannot see any ground for the idea of local infection, and feel confident that the man who attempts to check or cure diphtheria by local treatment will miserably fail. The only way to treat diphtheria is to do it in the same way as any other self-limited febrile disease. Maintain the general health by tonics (particularly the tincture ferri chlor.), nourishment, and the free use of stimulants. Try to steer clear of the quicksands of blood poisoning by endeavoring to preserve an aseptic condition of the exudation by antiseptic spraying. (I prefer the peroxide of hydrogen.) The only benefit that can possibly result from local treatment is the preservation of the exudation in an aseptic condition until the crisis is past, when it will, in due time, be cast off. Blood poisoning cannot take place without decomposition; therefore if we can prevent one we certainly prevent the other. All applications should be soothing, but strictly antiseptic. The atmosphere of the room should be kept saturated with the vapor of eucalyptol, carbolic acid, and turpentine.

This treatment is virtually the same as applied to all self-limited diseases, namely, piloting, keeping a strict watch ahead, endeavoring to avoid shipwreck, which, unfortunately, is sometimes impossible, and our patient passes away in spite of all our efforts to save him.

NOTES ON TWO CASES OF COCAINE POISONING.*

BY A. J. HARRINGTON, M.D.

Case 1.—A female, æt. 44, who had what is commonly called an "attack of piles." I had previously seen the patient treated by Dr. Johnson by injecting 5 per cent. sol. ac. carbolic and glycerine into the piles, which gave her almost entire freedom from her ailment until about three weeks before the present attack, when she caught cold. At the time Dr. Johnson had operated he had used a five-grain suppository of cocaine, and it acted admirably, the patient saying she had not felt the hypodermic needle at all.

On this occasion I found her in great distress. She had to get up to the chamber every two or three minutes, when she passed a small quantity of bloody mucus, attended by great tenesmus. She had been taking morphia powders without relief. I prescribed a six-grain suppository of cocaine, directing her to hold it in the bowel until it was dissolved. This was at 2 p.m. I was sent for in haste at 3.30 p.m., and when I got there I found her in this peculiar condition: The fingers of both hands were extended rigidly and peculiarly white; the right side and right lower extremity were numb-like and had a feeling of formication, but were not spastic. The left side was unimpaired; pupils dilated. She was quite sensible. There was great dyspnœa, with dryness of throat. The friends had resorted to the time-honored custom of rubbing the hands with whiskey, so I directed them to continue this treatment and I gave her a hypodermic injection of morphia sulph. ¼ gr. and atropia sulph. $\frac{1}{150}$. In about half an hour she was perfectly her natural self. The urgent tenesmus, I may say, was effectually relieved, and, strange

*Read before the Toronto Medical Society.

to say, I saw her a short time ago and she says she has never felt so well in years.

Case 2.—A male, æt. 27, with painful micturition from urethritis. I advised him to use one of the ¼ grain tablets of cocaine mur. in his hypodermic case, dissolved in a little water, whenever he felt the strangury. He used the few tablets he had, and the relief was soon obtained on each occasion he injected it. Having no more tablets, he telephoned to me from his office, asking if a solution of cocaine would do as well. I advised him to inject a teaspoonful of four per cent. in the same way as before. I may here mention that he had a hypersensitive urethra, so much so, in fact, that 1 drachm of a solution of 4 grains to 1 ounce of soda bicarb. gave him great distress. As he was in the habit of using cocaine in his daily practice, I thought it unnecessary to give him more explicit directions. However, he injected ℥j. 4 per cent. solution into the urethra and bladder. Almost instantly the pain was gone. In about five minutes he felt a numbness in the gluteal and crural regions, with a sensation of fullness in the perineum and tingling of hands and feet. This soon spread throughout the whole system. The muscles of his legs gave way under him, and, being near the bed, he crawled upon it. There was now a buzzing feeling in the head, which was rather a delightful sensation, except that it was alarming. He tried to move, but had no muscular power. He could feel himself gradually becoming more powerless, and must have gone off in a profound sleep, which lasted until about 7.30 p.m., six hours after the injection. He was still very stupid, but managed to get to his telephone (he being alone in his office) and rang me up. When I arrived he was all right except for a feeling of tightness in the lumbar regions. I gave him a hypodermic of ⅛ morphia, and next morning he was able to attend to his practice. The heaviness in his lumbar regions remained for several days. He had no more strangury.

In these two cases the action of the cocaine is peculiar. In case No. 1 the symptoms of overdose do not come on for 1½ hours after its administration, although there was almost immediate relief to the urgent tenesmus and it was applied to the most absorbing of mucous membranes. Its effects soon passed off entirely. In case No. 2 the symptoms appear in a few minutes and last several hours, and its remote effects last for several days. Was not it peculiar that the right lower extremity in case No. 1 was affected and not the left? Why were the small distal vessels of hands contracted? Why were the motor nerves affected and not the sensory? In case No. 2 the symptoms were unusually severe, although only half as much again of the drug was absorbed. Neither case could have been due to any fungoid action of the salt, as it was used dry in the first case and freshly prepared solution in the second. Were these cases of idiosyncracy? I have used 5-grain suppositories very frequently. I have injected hypodermically 1 drachm 10 per cent. solution 6 grs. over bulboes with no bad effects at all, but with most gratifying results; yet these cases were exceedingly alarming ones, and have since made me less heroic in using this drug.

Selections.

A PLEA FOR EXPLORATIVE INCISION IN ASCITES IN WOMEN.

BY T. GAILLARD THOMAS, M.D.

An exceptionally large experience in the abdominal surgery of the female leads me to the conviction that many women go to their graves from ascites who might have been restored to health by surgical procedure.

The special causes of ascites may thus be enumerated as to frequency of occurrence:

(1) Organic diseases of the liver.

(2) Chronic peritonitis.

(3) Tubercular peritonitis.

(4) Malarial spanæmia, accompanying great splenic enlargement.

(5) The existence of neoplasms within the peritoneal cavity.

(6) The prolonged existence of excessive fæcal impaction.

All these conditions, except the last, will so readily be admitted as common factors of the great symptom of which we are speaking that no special allusion to them will be necessary. The last will not be admitted by those who have had no personal experience of it. I will merely say that I have had such experience, and that I am

as perfectly convinced of the truth of my sixth proposition as to etiology as I am of that of the five which precede it.

Of these causes of ascites but three concern us here: The existence of neoplasms within the peritoneal cavity, chronic peritonitis, and that diseased condition of the peritoneum which has been styled "tubercular peritonitis." I allude to the last pathological condition thus doubtfully because it behaves in a manner so unlike tubercular disease developing in other parts of the body under the influence of surgical interference.

These three causes of ascites will, as to authenticity, be disputed by no one. All practitioners have in *post mortem* examinations met with instances of the second and third causes. As to the first, we see it in rare cases active with all varieties of solid tumor of the uterus and of fluid ones of the ovary. This is so well recognized as a fact that it requires no further consideration at my hands, so far as the general proposition is concerned. The special proposition which I would make in reference to them is this: that some cases of excessive ascites which by repeated tappings prove fatal are due either to chronic or tubercular peritonitis, which is recovered from by opening the peritoneal cavity and draining it thoroughly, or to the existence of insignificant uterine or ovarian tumors which are too small for recognition, unless specially and carefully sought for, and the removal of which relieves the fluid accumulation, which by its exhausting influence destroys life.

I have met with a number of cases in which I have succeeded in completely curing aggravated cases of ascites after tapping had been repeatedly resorted to, and after all hope of recovery had been given up.

I shall not weary the reader by a report of all these, for the proof does not consist so much in a long array of cases as in the portrayal of a few select and characteristic instances which clearly point out the pathological conditions which have been assumed as factors, and give evidence of the restoration to health effected by their removal.

Case 1.—Mrs. C., of Durham, Conn., came to me suffering from ascites, for which she had been repeatedly tapped, and from which she was rapidly growing weaker, so that death at an early period seemed certain. After each tapping a round hard tumor about as large as the head of a five-year old child could be readily detected in the pelvis, and this could be obscurely felt even when the dropsical effusion existed.

I opened the abdomen as an explorative procedure, and, finding a fibroid attached to the fundus uteri, removed it. The patient is perfectly well to-day, the dropsy having immediately disappeared.

Case 2.—Mrs. B., of Canada, came to me with ascites, which was accompanied by the presence of a solid tumor over one ovary, as large as a cocoanut. She had been tapped once only. I removed a solid tumor of the left ovary and she entirely recovered, and has remained free from dropsy for two years.

Case 3.—Dr. Hurlburth, jr., of Stamford, Conn., sent me a patient suffering from ascites, in whom I could detect, by vaginal touch, what seemed to be a pelvic neoplasm. I made an explorative incision, found a tumor in Douglas' pouch, no larger than an apple, which I removed, and the patient recovered from the operation and from the abdominal dropsy. The tumor, examined by Dr. Coe, pathologist of the Woman's Hospital, was pronounced sarcoma. One year afterwards I received the following report of the case from Dr. Hurlburth: "Since the operation the patient has been perfectly comfortable, but now a hard tumor can be felt occupying the pelvic cavity, and ascites is gradually beginning again to demonstrate its existence."

This patient lived in great comfort, Dr. Hurlburth has more recently told me, for six years, and then died of pneumonia.

Case 4.—This was a counterpart of Case 3, except that the post-uterine tumor was a benign fibroid attached by a rather slender pedicle to the posterior wall of the uterus. The patient, who was an inmate of the Woman's Hospital, left that institution at the end of a month well; but since that time I have lost sight of her.

It is very difficult indeed, I may say impossible, to tell why in a certain small number of cases these tumors create ascites, while in other cases they may occupy the peritoneal cavity for years without causing any such trouble; but that such is the fact is beyond question. As an illustration, I mention the following case:

Case 5.—I saw some years ago, with Dr. Emil

Noeggerath, a lady who suffered from severe enteralgia, which was created by the presence of an ovarian cyst as large as an adult's head, which was so migratory in its nature that it could be pushed anywhere in the abdomen from the pelvic roof to the diaphragm. As there was no urgency in the case, and as the patient and her friends dreaded surgical procedure to a morbid degree, we decided to avoid interference. Fourteen years passed, and I was again called in council by Dr. Noeggerath. The tumor was only about double the size which it had been fourteen years before, but its nomadic tendencies had created ascites, which was greatly distressing the patient, who now clamored for relief by surgery. I assisted Dr. Noeggerath in the removal of a monocyst with the longest pedicle that I ever saw in an ovarian tumor. The patient rapidly recovered, and has been ever since free from ascites.

It is rare to find even a monocystic ovarian tumor running so long a course; but I have removed one which had lasted for twenty-four years, another of sixteen, and another of nine years' duration.

In Dr. Noeggerath's case doubtless the extreme mobility of the cyst had a great deal to do with the resulting irritation of the peritoneum, and the development of dropsy. Such a complication of ovarian cysts is extremely rare.

I have treated quite a large number of cases of ascites due to chronic and tubercular peritonitis with perfect success by abdominal incision and drainage. To give the notes of more than one of these would be tedious and unprofitable, for they resemble each other very closely indeed. As a very good example of the class, I will give a short sketch of

Case 8.—Miss G., a young lady of nineteen years of age, was brought to me by Dr. Isaac Adler, twenty months ago, with a fluid accumulation in the abdomen, which had existed for five or six months, and had been accompanied by menstrual disorder, emaciation, a low grade of fever towards evening, and loss of appetite and strength. Regarding the case as one of ovarian cystoma, I made an explorative incision, in the presence of Dr. Adler and others, which revealed ascites, due to diffuse deposit of miliary tubercle scattered over the whole abdomen. A drainage tube was kept *in situ* for a month or six weeks, and the patient made a rapid and complete recovery. Writing to Dr. Adler for news of her to render this history complete, he replies in the following words:

NEW YORK, Nov. 10th, 1891.

DEAR DR. THOMAS.

In reply to your lines inquiring after the health of Miss G., I am glad to be enabled to state that she is ostensibly in the best of health. Since the operation, which, as you recollect, took place in March, 1890, she has steadily gained in weight, weighing to-day about twenty-five pounds more than at the time of operation, and asserts that she is now in better health than ever before. Yours very sincerely,

I. ADLER.

The word "ostensibly" in Dr. Adler's letter rather weakens this case, but Dr. Adler in conversation assures me that the patient has had no return of the dropsy, is in perfect health, and anticipates marrying very soon.

Explorative incision, practised with antiseptic precautions now at our disposal, is not a dangerous procedure. If a good result attend it, a saving of life is the outcome; if it reveal an incurable or organic disease, no evil will usually accrue; and even if a fatal issue should be its consequence, we will be forestalling death by a short time only, in a praiseworthy effort at the securing of life.

It appears to me that with the evidence which is before us we should accept the following as a rule for practice: *In every case of ascites in woman, the propriety of explorative abdominal incision should always be carefully considered; not with the view of establishing a certain diagnosis alone, but with the reasonable hope of effecting in exceptional cases a cure.—Abstract N. Y. Jour. of Gyne. and Obstet.*

FORTY YEARS' EXPERIENCE IN THE USE OF CHLOROFORM.

BY LOMBE ATTHILL, M D.,
Ex-Master of the Rotunda Hospital, Dublin.

The controversy as to the physiological action and safety of chloroform and ether respectively is being caried on as actively as ever; indeed, the report of the Second Hyderabad Commission—appointed mainly with the view of settling these points, and which affirms distinctly that death from the inhalation of chloroform is due to asphyxia, and which came to the conclusion

that chloroform, if carefully administered, was as safe as ether—has only served to intensify the controversy and stimulate those who hold contrary views to denounce its conclusions and to affirm more positively than ever that failure of the heart's action is the primary cause of death when such occurs.

I commenced to administer chloroform in the summer 1851, when I was appointed assistant to the then master of the Rotunda Hospital, and with the exception of about three months in the course of my own mastership of that institution, during which I tried ether, I have used no other anæsthetic—and in midwifery never any other.

During the three months alluded to I employed ether in all gynecological cases. Amongst these were two of laparotomy, both of whom died, and I attributed their deaths to the effects of the ether. One of them was a fairly healthy woman, the subject of ordinary ovarian cystic disease. She objected greatly to the ether, declared she was being smothered, and began to cough immediately; this distressed her very much, was nearly continuous, and greatly interfered with me during the operation. On her recovering consciousness, the coughing became incessant. Bronchitis supervened, and ended fatally, a most unfortunate result to a promising case. In the other patient, who violently resisted the inhalation of the ether, vomiting set in before she was under its influence, recurred repeatedly during the operation, and on the withdrawal of the ether became incessant. Nothing was from the first retained on the stomach. She died on the fifth day. From that date I ceased to use ether, and I have never once given it since, except towards the end of a few very protracted cases, in which I substituted it for the chloroform, as being less depressing, but to this point I shall refer by and by.

I regret I am unable to give any precise details as to the number of cases in which chloroform has been administered in my practice. I can only say that during my term of office, first as assistant and then as master of the Rotunda Hospital, about fifteen thousand patients were delivered within its walls, and as chloroform was administered in every case of difficult or complex labor, as well as in many with the object of relieving suffering, it was in constant use, and if to these be added the numerous instances in which I employed it in my private midwifery practice, I am satisfied that it was used by me in midwifery upwards of three thousand times. Indeed, I believe this estimate to be considerably under the mark, and amongst these there was never once cause of alarm, much less did a death occur.

I have again to regret my inability to make any accurate statement as to the number of cases in which I have administered chloroform in my gynecological practice, but certainly they have been over two thousand, that would be an average of only fifty cases for each year over which this retrospect extends; in truth I believe this estimate might be safely doubled.

The cases in which I have administered chloroform included every possible form of gynecological disease; amongst them were one hundred and twenty-five cases of abdominal section. Some of these were necessarily very tedious. I made it a practice never to hurry over an operation or to try to finish it within a stated time; in many cases I have kept patients under the influence of chloroform for considerably over two hours, but the longest time during which in any one patient complete anæsthesia was maintained by the use of chloroform alone was three hours and a half.

Now as to the result, I have had one death, but that I consider can hardly be laid to the door of chloroform; her life was lost through injudicious though well-intentioned treatment, adopted when respiration, perceived to fail, was being restored. The patient was the subject of an enormous ovarian tumor; it extended from the brim of the pelvis to the diaphragm, and was free from any adhesions. Chloroform was administered by Dr. Andrew Horne; the patient took it without making any objection, and had inhaled it only two or three times when Dr. Horne exclaimed that respiration had ceased. He at once withdrew the chloroform and commenced artificial respiration by extending the arms and drawing them upwards, and the patient immediately inspired deeply. At this moment one of the bystanders exclaimed, "lower her head," and some one seized her legs and elevated the pelvis, while another pulled her shoulders off the table till her head almost

touched the ground. The effect of this was that the huge tumor pressed downwards on the diaphragm, rendering inspiration impossible, and the patient never breathed again. I believe, and so does Dr. Horne, that but for this unfortunate act the woman would have been all right in a few minutes.

There is no doubt—and it is admitted on all hands—that chloroform is more energetic than ether, that it acts much more quickly, and that if given in a concentrated form it kills rapidly. In other words, it is a much more powerful agent than ether; is consequently more dangerous in unskilled hands; and that the patient requires to be more carefully watched by the administrator than if ether were employed. But, in my opinion, these are insufficient grounds for rejecting it, and I do not think they counterbalance the objections which exist to the use of ether, and which are very obvious: (*a*) The inhalation of ether is very irksome to the patient, and few patients who have subsequently taken chloroform are willing to take ether again. (*b*) It is most irritating to the air passages, and the irritation does not by any means always pass off when the inhalation is suspended. (*c*) Vomiting is more easily excited by ether than by chloroform; and when it does occur after the inhalation of chloroform, it is in general less distressing. (*d*) The effects of the ether, even when vomiting has not occurred or has ceased, last much longer; specially a feeling of nausea and the taste of the ether in the mouth remains a long time, and sometimes lasts for days. (*e*) Ether must be given in a concentrated form; if air be freely admitted anæsthesia cannot be produced; so the patient has to be half suffocated, and compelled to reinhale air already expired; whereas, in using chloroform, pure air only moderately charged with the anæsthetic need be used.

In administering chloroform, three things are absolutely essential for its safe use: (1) The chloroform must be pure; (2) the apparatus used must be such as to admit air with the utmost freedom; (3) the administrator should give his whole attention to his duty, constantly and carefully watch the respirations of the patient, and frequently also feel the pulse, which is most easily done in the temporal artery.

As to the apparatus used, I give the decided preference to that known as Junker's. In it, the air being forced through the chloroform, it is impossible to administer it in a concentrated form; while, moreover, perfectly pure air enters the mouth pretty freely round the edges of the mouthpiece. For many years I have used no other. It is not so portable as Skinner's, which in midwifery practice answers well enough; but I never employ it in any surgical operation, and I believe that the immunity I have enjoyed from trouble is in no small degree due to my having long ago adopted this method of administering chloroform.

Some practitioners administer chloroform on a pocket handkerchief or piece of lint laid over the mouth and nose. I have never seen this done without having the account of the murder of Benhadad as given in the second book of Kings forcibly brought to my mind; and I would commend the study of that chapter of the Bible to all practitioners who think of using this dangerous method.

If chloroform is to be safely given, it is essential, in addition to procuring a pure drug and selecting the best inhaler, to see that the person who administers it, not alone understands what he has to do, but conscientiously carries it out.

Ether being a less powerful anæsthetic than chloroform, and being also less depressing, it can without doubt be given with somewhat less care than chloroform; and if neither a proper inhaler nor competent chloroformist can be obtained, it is better to use ether. Again, in very tedious operations, I generally deem it wiser to substitute ether for the chloroform after two hours have elapsed, not that I by any means do so always.

Perhaps I should add that whenever I have given ether I used Ormsby's inhaler, which, so far as I know, is the best.—*Brit. Med. Jour.*

DIVERTICULA FROM KNEE-JOINT.—The occurrence of diverticula from the knee-joint bulging into the popliteal space, or of enlarged bursæ in the same position, is, I feel sure, not unfrequently a symptom of rheumatic gout, or even of true gout. Amongst my cases for diagnosis (*Archives*, vol. i., p. 190), I have given a case of this kind in a lady whose father, as well

as herself, had suffered from gout. I have recently been attending a gentleman in whom first one knee and then the other was attacked. The knees became slightly swollen and very stiff, but there was very little appreciable synovial effusion, and he could still walk about. The principal objective symptom was bulging in the popliteal space. Under abstinence from wine and the use of alkalies, the conditions entirely disappeared. There was, however, a tendency to relapse on reverting to the same habits of diet six months later. From the behavior of the case, there could not be the slightest doubt that the knee symptoms were due to wine-drinking. They were therefore to be classed as gout rather than rheumatism. Two of the patient's uncles had suffered from chronic rheumatic disorganizing arthritis of the knee, and he himself had on one occasion had a transitory attack of free synovial effusion into one knee.

I remember well a case of this kind which was operated on by a colleague, many years ago, at the London Hospital. It was believed to be a bursa, but it proved to have a communication with the joint itself. The patient died of suppurative synovitis. This was before the days of antiseptic surgery. With modern precautions it does not, perhaps, matter very much whether the cyst be a diverticulum or an independent bursa, since the operation will be attended by scarcely appreciable risk. I doubt, however, whether even now it is advisable to operate in these cases. The popliteal swelling, whether purely bursal or otherwise, is usually only an accompaniment of arthritis, and is by no means the cause of all the stiffness and inconvenience. Its removal would probably, in the majority of cases, effect very little for the patient's comfort. In many cases patients go on for years with these swellings and find them but little impediment in walking. If operations for their removal are attempted, it is needless to say that they should be done with the strictest antiseptic precautions.

I have been induced to make the above remarks in consequence of having been consulted in the case of a gentleman who is the subject of swellings of this kind, and for whom an operation had been advised. He was about 40 years of age, and accustomed, in the pursuit of country pleasures, to take a great deal of exercise. He, however, inherited gout, and had lived freely, drinking any kind of wine that came in his way. During the last few months a swelling had appeared in his left popliteal space, and it had increased to the size of a small orange. Pressure upon it made it bulge under the inner hamstrings. I could not satisfy myself that it was in any way possible to empty it into the joint. It was quite painless, and, excepting that it made the joint feel a little stiff, it did not incommode the patient in walking. During the week immediately preceding his visit to me, the commencement of a similar swelling in the opposite limb had been detected, and this had led to the proposed operation being deferred. I inquired carefully as to any symptoms of gout. Mr. C—— assured me that he had never had that disease, but added, "I have been suffering lately from neuralgic pains in my joints." By this expression I found that he meant precisely the kind of pain which often occurs in association with tendency to gout. I advised that the operation should be deferred until trial had been made of drugs and a modified form of diet.—*Jonathan Hutchinson, in Archives of Surgery.*

A CASE OF UMBILICAL HEMORRHAGE.—On the 24th of December, 1890, I was called to see Mrs. E. She had been married eleven years; had had one child eight years ago. No miscarriages. She was a large, well-nourished woman and had always enjoyed excellent health. She was now eight months pregnant. On the preceding day she had taken a laxative. I was called to check a violent diarrhœa which had been in operation during the night and forenoon. She had considerable griping, but no uterine pains or uterine hemorrhage. No vaginal examination was made. Morphine was prescribed and in six hours I called again. She was then having labor pains, and the os was dilated to the size of a half-dollar. It was a face presentation. Labor progressed normally, and in four hours she gave birth to a male child weighing three pounds and a half. It was weak, poorly nourished, and had a pronounced "old-man" appearance. The possibility of hereditary syphilis was entirely eliminated by information from a thoroughly reliable source. The child was enveloped in cotton and en-

trusted to a competent nurse. It did well. On the fourth day the cord separated and the umbilicus assumed the usual appearance. By the eighth day it had gained considerable strength, and its battle for life seemed to have been won. On the afternoon of this day the nurse found the abdominal band stained with blood from the navel. When I called I ordered alum to be applied if there was any more bleeding. I was called in three or four hours, there having been a return of the hemorrhage which alum and other astringents had failed to control. I poured brandy over the navel, which immediately stopped the bleeding, and it did not return for six hours. Upon its reappearance, brandy was again tried, but without avail. Pledgets of absorbent cotton, saturated with Monsel's solution, were then pressed into the umbilicus and held there. This promised good results.

Dr. A. C. Wilson, of Youngstown, was called in consultation. It was decided to pack the navel with the saturated cotton and arrange a graduated compress over this, held in place by an elastic bandage encircling the abdomen. For eight hours no hemorrhage was visible, and the anxiety of the family and myself had somewhat abated. At the end of this time, to our dismay, blood was found oozing from beneath the bandage. A fresh dressing was applied, but to no purpose. I then placed my thumb upon the navel, and, with my fingers over the lumbar vertebra, the navel could be compressed against the bodies of the vertebræ, controlling the bleeding. The father and myself alternately compressed the umbilicus in this way for several hours, but eventually the blood would well up around the compressing finger with every movement of the now restless and almost transparent babe. Finally, no degree of compression we were able to make would control the hemorrhage. Our efforts were as fruitless as those of Sisyphus. At this juncture I obtained the consent of the family to transfix the umbilicus with needles. The needles were introduced at right angles to each other, going deeply into the tissues and crossing each other beneath the umbilical depression. The ends of the needles were approximated and a figure-of-eight ligature applied. This controlled the bleeding at once. After forty-eight hours the needles were removed, and, happily, there was no return of the hemorrhage. The child rapidly gained flesh and strength, and now, at the age of eleven months, is a fine, healthy baby, never having been sick since this early experience.

Fortunately, these cases are rare, occurring only once in about five thousand births. The case reported in the *Journal* for October 31st by Dr. Wagoner is a very interesting one. The method of treatment which proved successful in his hands should not be lost sight of, as the high percentage (eighty-three per cent.) of deaths in these cases shows how inefficient treatment has been, and the success of this treatment, after the usual remedial measures had been tried and found wanting, bears testimony to its efficiency.—*R. H. Montgomery, M.D., in N. Y. Med. Jour.*

THE TREATMENT OF DIPHTHERIA.—To what extent principles of treatment of cases of infective disease may be modified by the acquisition of true knowledge concerning the nature of such affections is well shown in a paper read recently before the Clinical Society of Paris by M. Barbier, in which he dealt with the subject of diphtheria (*La France Médicale*, January 1st, 1892). He pointed out that the researches of Klebs, Lœffler, Roux, Yersin, and others, have now conclusively established that the pathogenic agent is a bacillus, which is only to be found in the false membranes, and does not penetrate either the blood or tissues. That discovery decides the much-disputed question of the "local" or "general" nature of the malady. The "false membrane *is* the disease," and the primary object of all medication must be to detach and remove it wherever it is accessible; for one removes thereby not only the morbific agent, but the toxalbumens which the microbe elaborates, and which are the source of the symptoms. But experiment also teaches that the bacillus does not develop on healthy or non-excoriated mucous membrane, and it is therefore of chief importance that the false membrane should not be detached violently, but gently and slowly. Cotton wool held in forceps gently and with frequent patient repetition brushed over the false membrane will gradually detatch it, but care must be taken not to touch any other part. This is the first step. The next is to apply to

the affected area such an antiseptic solution as has been proved by experiment to destroy the bacillus. Under M. Grancher, M. Barbier had largely studied this subject experimentally, and found carbolic acid to be the best parasiticide for this purpose; and he now recommends the application of a mixture of sulphovininic acid (100) and carbolic acid (20) as more efficacious than carbolic acid and glycerine or olive oil, as hitherto adopted. This "*phenol sulfoviciné*" causes a transitory sensation of heat and burning, but its taste is not very pronounced, and, he says, children tolerate it well. Moreover, although frequently applied—every hour by day, every two hours by night—M. Barbier has never seen any sign of carbolic poisoning. Before applying it each time there should be practised free irrigation of the naso-pharynx, which aids in detaching more membrane, the warm water being rendered antiseptic by the addition of a small quantity of an alcoholic solution of salol (1 in 40). He claims for this procedure, vigorously carried out, a marked amelioration in the more serious signs of infection—the redness of the throat, glandular swelling, constitutional symptoms, and albuminuria. Similar principles he applies to the after-treatment of tracheotomy in laryngeal diphtheria; and he advises the prescription of calomel and naphthol to promote intestinal antisepsis, rendered necessary by the swallowing of portions of membrane detached from the fauces. Then general tonic treatment, with plenty of fresh air and sunlight, and avoidance of close rooms and steam. He gives no statistics, but he claims to have seen many good results from adhering thus rigidly to the teachings of the laboratory; and certainly there is no greater field for the study of diphtheria than the Paris Hôpital des Enfants Malades, where M. Barbier's observations have been made.—*Lancet.*

SUTURE OF THE ULNAR NERVE.—D.S——, a young man, aged eighteen years, while playing with his brother in July, 1890, who had a large knife in his hand, accidentally turned round and cut him in the arm, dividing the ulnar nerve in the thickest part of the arm, about two inches below the elbow. Sensation along the course of the ulnar nerve in the arm was quite lost, together with all feeling on the inside of the ring finger and both sides of the little finger. Considerable muscular atrophy of the arm and the ulnar side of the palm of the hand followed. The abductor minimi digiti and flexor brevis minimi digit seemed quite lost, and the hand was quite flat on the outside. Galvanism, rubbing, and other means, I believe, were tried with no avail. On April 1st, 1891, nine months after the accident, the ulnar nerve was sutured. It was with considerable difficulty that the ends of the nerve could be found; they seemed to have become continuous with the surrounding tissues, and the cicatricial tissue seemed to make the ends still more tedious to find. At last I found the nerve, and then traced it up to its divided end. Having got one end out, the other end was found by at once cutting down on the course of the nerve from the ulnar, and tracing it to the divided end. If in future I have the same operation of suturing a divided nerve, I shall make the incision sufficiently long to be well on each side of the cicatrix, so that the nerve can be dissected out of its divided seat from above and below respectively. The nerve having at length been found, I vivified the ends, and with two fine silk thread sutures brought the cut or divided ends into nice apposition. The wound was then thoroughly cleaned out, all points of hemorrhage stopped, stitched up, and dressed with dry dressings. The wound healed up uninterruptedly with no drawbacks. On April 2nd (the day after the operation), at 9 a.m., which was three hours short of twenty-four hours from the time the nerve was sutured, the boy could feel distinctly when I touched him on the fingers or on the arm. On the 3rd (the second day after the operation), I asked the father of the boy to test his sensation. He did so with a feather by drawing it along the arm and on the fingers. Sensation was quite evident; the boy could feel distinctly whenever he was touched. I examined him again on Oct. 26th, 1891. The arm was considerably increased in size, but the palm of the hand on the ulnar side was still very much atrophied. The sensation along the course of the ulnar nerve still remained good. He could feel a pen lightly drawn along the course of the nerve, or over the parts supplied by it. The early return of the sensation after the suturing of the nerve seems very extraordinary; still, it is a fact, and it certainly did occur.—John E. Garner, M.D., in *The Lancet.*

TREATMENT OF CHLOROFORM ACCIDENTS.—In an article in a Russian surgical review, Prof. Bobroff recommends the employment of hypodermic injections of the physiological solution (0.6 per cent.) of common salt in case of failure of the heart's action during the administration of chloroform. He has employed this method for four years with satisfactory results, and considers it decidedly preferable to the subcutaneous injection of ether and other stimulants. With regard to ether, he says that it stimulates the cardiac action for a time only, afterwards having a paralyzing effect. Strychnine, atropine, ammonia, the previous administration of digitalis, and the inhalation of amyl nitrite, he considers more or less dangerous and by no means satisfactory, while the hypodermic use of the physiological solution of common salt is perfectly innocuous, and has proved in his hands very valuable. It is best not to wait for complete stoppage of the heart or respiration. If only a moderate quantity of blood has been lost before symptoms of danger show themselves, an ounce or so of the fluid is sufficient to inject; in anæmic patients, or where a large quantity of blood has been lost, 3½ to 7 ounces may be required. The liquid is readily absorbed, especially if the locality is manipulated a little. The pulse becomes stronger, the respirations deeper, and the patient rapidly recovers. The solution may be made alkaline by the addition of 0.05 per cent. of caustic soda. Prof. Bobroff objects to the employment of such means of peripheral stimulation as affusion of cold water, the introduction of ice into the rectum, and putting ammonia to the nostrils, as these may by reflex action induce failure of the heart and arrest the respiration. The best and safest remedies are, he thinks, injection of solution of common salt hypodermically or into the venous circulation, lowering the patient's head, galvanizing the pneumogastric nerve, and the employment of Silvester's method of artificial respiration.—*Lancet.*

INFLUENZA A HUNDRED AND SIXTY YEARS AGO.—An Italian correspondent reminds us of the historic epidemic of influenza in Milan between the years 1730-33, described by the contemporary physicians, Drs. Gagliardi, Bellegatta, and Crivelli. The last named, a Milanese practitioner in advance of his time, found in the air the "chief and efficient cause of the influenza visitation." In 1730 and 1733 the climatic conditions were as nearly as possible the same as those prevalent in the last two epidemics in Italy; that is to say, a mild temperature, the sirocco wind predominant, and much humidity, with fog and rainfall alternating. Dr. Crivelli's description of the symptoms of an influenza patient might (our correspondent says) be transcribed from the phenomena of to-day: "Gravedo and coryza, general languor with indisposition to exertion of any kind, loss of appetite even in presence of the daintiest viands, pain in the sinciput, giddiness, dimness of eyesight, high fever with rigors and *horripilatio* extending over the whole body; cough sometimes moist, sometimes dry enough to induce a choking sensation." These symptoms, not very grave in themselves, says Dr. Crivelli, are apt to reach an acute and even pernicious stage—"the patient finding himself suddenly oppressed with a suffocating catarrh (*un catarro soffocativo*), or, in other cases, with a pleurisy, or a pleuro-pneumonia. One patient falls as by an apoplectic stroke, another complains of intolerable cephalalgia—the old, the phthisical, the asthmatic, rarely outriding the storm." It would be difficult to give a truer account of the course and issue of the influenza cases now occurring at this hour in the Alta Italia. Dr. Crivelli further shows himself ahead of his age in his severe condemnation of indiscriminate venesection, stigmatizes the abuse of diluents, and rests his system of treatment on vigilantly regulated diet and the support of nature. Of course, he used heroic measures when time was precious—even bloodletting when engorgement of the circulation was a distressing symptom—and he found great efficacy in the Hippocratic prescription: "Alvus curanda est per clysterem subducentem et frigefacientem." Other less rational measures he also recommends, taken from a pharmacopœia happily superseded. But, according to the lights available at the time, he seems to have been a thoughtful and ingenious clinician, and his treatise has quite a special interest for the student of the history of medicine.—*Lancet.*

INFLUENZA AND LONGEVITY.—Whenever a period of low temperature or of fog, or of both

in combination, unfavorably affects our rate of mortality, the death-rate of the aged and of elderly persons shows a far higher rate of increase than the death-rate of the young or middle-aged, or even of infants. The veriest tyro of mortality statistics would recognize this as the natural result of the meteorological conditions above referred to. It may be noted, however, that as often as these conditions prevail, and the obituary notices in *The Times*, for instance, consequently show an unduly excessive proportion of deaths of elderly persons, some industrious paragraphist is sure to compile a statistical return showing the number of old people whose deaths have been advertised out of a given number of death notices announced during a given week. These figures are harmless enough in themselves, and useless enough, since no figures are ever given showing what are the normal proportions of the ages of the well-to-do classes whose deaths are so announced. The figures are, however, absolutely mischievous when the paragraphist or correspondent is allowed to draw inferences to the effect that this excessive and exceptional mortality among the aged affords evidence of increasing longevity. It is, however, a fact that during the past fortnight more correspondents than one in our lay contemporaries have referred to the fatal effect of influenza among the aged, judged by the obituary notices in *The Times*, as evidence of increased longevity. It is undoubtedly true that the proportion of deaths of elderly persons under the combined influence of low temperature, fog, and influenza has been abnormally high in recent weeks; but it is impossible to recognize any reasonable grounds on which this influenza mortality can afford evidence of increased longevity. Against such a misuse of statistics we feel bound to record our emphatic protest.—*Lancet.*

MEMORANDA ON THE FÆCES.—Differences in color, etc., of the fæces are often very misleading both to patients and practitioners. Very insufficient allowance is usually made for the direct influence of articles of diet. I have therefore put together the following memoranda in the hope that they may be useful to some of my readers. They contain, of course, nothing original:

The fæces are the remains of the food taken, modified by partial digestion and by the secretions which have been added.

Thus the color of the foods taken may often give the color of the fæces. Blackberries, whortleberries, and many other fruits, invariably give a dark tint. So also claret and red wines in general. Iron, as is well known, may make the motions black.

Carbonate of magnesia may make the fæces white.

A milk diet will give white or pale motions; so also, unless counteracted by other articles of food, may the use of white wines, champagne, etc., in the place of red ones. Self-observant patients are often deceived into thinking themselves out of health by forgetting some change of diet of this kind.

All sorts of green food, salads, spinach, cabbage, French beans, etc., tend to make the motions loose, and may make them definitely green. In children this may be so marked as to lead to the suspicion of bile disturbance.

Different purgatives may also modify the color of the stool.

Thus it may be broadly stated that the color of the stools, unless carefully estimated, is a very fallacious sign.—*J. Hutchinson, in Archives of Surgery.*

EXCISION OF ENCYSTED TUMORS OF THE SCALP.—In the case of the common encysted tumor of the scalp, the cyst itself should be freely opened from side to side. This is best done by thrusting a narrow, curved bistoury through the tumor and cutting upwards. The inexperienced are apt, as in the case of the meibomian cysts, to mistake the contents for the tumor itself, and thus leave the shell behind. I am accustomed to eject the cyst from its bed by pressing with the two thumbs, one on each side, the nail being made to dip well under the bottom of the cyst. In this way a dozen may be taken out in as many minutes. It is better not to cut the cyst into two halves, as it is easier to get it out if the posterior part remains whole. The thicker and more rigid the cyst, the easier it is to eject by pressure. When unusually thin, it may be necessary to drag it out by forceps.—*J. Hutchinson, in Archives of Surgery.*

POLYURIA IN PHTHISIS CONTROLLED BY FULL DOSES OF ERGOT.—By Wm. S. Barker, M.D., in *Medical News*. H.E., a mulatto, thirty-one years of age, entered the City Hospital, Nov. 7th, with well-marked symptoms of pulmonary tuberculosis. No tuberculous trouble could be located elsewhere than in the lungs. Whether the symptom about to be described was due to tuberculous deposit in the kidney or in the neighborhood of the controlling cerebral centres in the fourth ventricle could not be satisfactorily determined. During the preceding October the patient had for the first time been somewhat annoyed by frequent, copious, and persistent micturition. Examination of the urine gave the following result: Acid reaction; specific gravity 1004; no albumin, sugar, or casts. But the quantity of urine voided was very considerable, as following record will show:

	C.c.	Pints.
Nov. 14-15	5,000	10.0
" 15 16	10,400	20.8
" 16-17	8,200	16.4
" 17-18	10,600	21.2
" 18-19	9,100	18.2
" 19-20	7,200	14.4
" 20-21	6,000	12.0
" 21-22	4,400	8.8
" 22-23	2,400	4.8

The marked and steady decrease of urinary excretion after the 19th was due to the administration of rather large doses of fluid extract of ergot. One c.c. doses were given frequently, about 8-10 c.c. being taken daily. The quantity of urine at once began to diminish, and did so steadily each day, declining from 10,600 c.c. to 2400 c.c. per day, at which latter figure it remained until the dose of ergot was discontinued or was made much smaller, when a rapid rise in the quantity of urine took place. This was again brought well under control by increased doses of ergot. The patient succumbed to his pulmonary affection in a few months. Polyuria existed until shortly before death. The autopsy revealed only pulmonary tuberculosis.—*Medical News.*

THE VALUE OF THE IODOFORM-GAUZE TAMPON IN POST-PARTUM HEMORRHAGE. Additional testimony as to the value of the tampon of iodoform gauze in treating post-partum hemorrhage is given by Staheli (*Correspondenzblatt für Schweizer Aerzte*, No. 21, 1891). In the clinic at Berne, nine fatal cases of post-partum hemorrhage occurred in 5424 births during a period of eight years. Of the nine, six were cases where anæmia was the immediate cause of death. In forty-nine cases in which the tampon was used, better results were obtained than by any other method of treatment. These cases were divided into two groups: one in which hemorrhage occurred from a source which was determined, and the other in which the tampon was used as a prophylactic against hemorrhage. In the first were cases of placenta prævia, transverse position, and other similar complications. In the second class were cases of contracted pelvis, and also of Cæsarean section. In using the tampon, strips of iodoform gauze are preferred; thorough antiseptic precautions should be taken to disinfect the patient and the material which is used.—*Amer. Jour. of Med. Sc.*

ON THE TORSION OF ARTERIES.—In connection with operations for excision of tumors, and other excisions of a like character, Jonathan Hutchinson remarks as follows: "I may mention that for many years I have quite ceased to use any other means for arrest of arterial bleeding than torsion. In excisions of the breast, for instance, I do not think that I have during the last fifteen years ever used a ligature. The torsion is always effected by a pair of Wells' clamp-forceps, now in such universal employment. I am always extremely careful to close all vessels, keeping the wound exposed for a considerable time for that purpose. Very seldom, indeed, have I encountered any secondary hemorrhage."—*Archives of Surgery.*

IMPORTANCE OF OPENING THE CAPSULE IN THE EXCISION OF CERTAIN TUMORS.—In the excision of ordinary fatty tumors, the knife should at the first stroke enter freely into the substance of the mass. They are enclosed in a cellular-tissue capsule, and this should be freely opened. If, instead of doing this, an attempt be made to dissect them out without wounding the capsule, the procedure will be long and tedious; whilst if the latter be only opened with sufficient freedom, they may usually be shelled out with

the finger. The same remark applies to adenoceles of the breast. It is scarcely possible in either case to cut into the tumor too freely. —*J. Hutchinson, in Archives of Surgery.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

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TORONTO, FEBRUARY 1, 1892.

THE MEDICAL COUNCIL AND THE ANNUAL ASSESSMENT.

There can be no doubt about the fact that the action of the Medical Council with reference to the annual assessment at the last meeting is exceedingly unpopular with a large proportion of the profession in all parts of the province.

The following is the text of the enactment objected to :

"That the Registrar shall, on the 31st day of October in each and every year, send to each member of the College of Physicians and Surgeons of Ontario who has, up to that date, failed to pay his dues and to take out his annual certificate a registered letter addressed to the registered address of such member, informing him that unless the said dues are paid by the 31st December of that year his name shall be erased from the register of the College of Physicians and Surgeons of Ontario, and the Registrar shall erase the names from the register of all persons who have not paid their dues for one year, counting such year from the 31st December in one year to the same date in the next."

The opponents of this by-law have shown their disapproval in various ways, and many letters have appeared in the lay press. Some of the writers display strong indignation, while others show exceedingly bad temper. A discussion of such a question is always in order, but wholesale abuse of the members of the Council is, to say the least, quite unnecessary. It will scarcely serve any good purpose to try to prove that the physicians of Ontario have elected a pack of designing scoundrels who have brought this province to the verge of ruin through dishonest investments in real estate and other nefarious transactions.

Upon the whole, we think few can doubt that the Council has done much for the profession of Ontario. Its members are, as a rule, desirous to do their duty by their constituents. Probably the majority are willing to acknowledge these facts, and have given the Council a fairly loyal support during the last few years, although by no means an enthusiastic one. The rather active delirium in some quarters over the two dollars' enactment has created some surprise; but there is abundant evidence that there is a deep feeling of resentment among many who are able and willing to denounce the action of the Council without becoming hysterical.

A good example of this was presented at the last meeting of the Huron Medical Association, when, after a discussion of the question, the following resolution, proposed by Dr. Graham, of Brussels, and seconded by Dr. Young, of Kirkton, was unanimously adopted :

"Resolved : That the members of this association desire to enter their most earnest protest against the objectionable section in the recently amended Ontario Medical Act whereby the power is conferred upon the Medical Council to erase a member's name from the register for non-payment of the annual fee, and that effort be made, by petition and otherwise, to call the attention of the Local Legislature to the fact that the immediate repeal of section 27 of the Ontario Medical Act is greatly desired, and that a copy of this resolution be forwarded to the local members for Huron and Perth, and to the Hon. Oliver Mowat, to whom the medical men of Ontario now most earnestly appeal for support against this unjust legislation."

RESPONSIBILITY OF A HOSPITAL AND THE MEMBERS OF THE STAFF.

An important decision was recently given by Judge O'Brien, of New York. It appears that in 1885 a Mr. Hartt, who had been a patient at the New York hospital, brought an action for damages for alleged ill-result of an operation. The question raised at the trial was whether the operation had been skilfully performed by the surgeon, Dr. Bull. A verdict was given in favor of the hospital.

A few months ago the plaintiff brought an action on the same grounds against Dr. Bull. The defendant's counsel put in the plea that, as the suit had already been brought against the hospital and had failed, the plaintiff had no standing in the court, his case having been finally disposed of. The judge concurred in this view and gave his decision in favor of Dr. Bull.

The *United States Medical Record*, in commenting on the case, speaks as follows:

"Let us see what might result in case a different view had been taken. Given a case in which, during the absence of the regularly appointed surgeon to a hospital, and the tenancy of a *locum tenens*, an operation is performed by one of the house-surgeon's assistants with unfavorable result.

"The patient brings suit against the hospital corporation, and, failing, sues the attending surgeon. Unsuccessful in this, he sues the *locum tenens* as representative of the surgeon. Then, in turn, the house-surgeon and the latter's assistant.

"The same case would go before successive juries, each time upon the same merits, but with a different defendant. The inconvenience and expense at which the hospital and its surgeons would be placed can well be imagined.

"It is a principle in law that in failure of an action against the master for the act of a servant, the same suit cannot be brought against the servant. Judge O'Brien, in his decision, looks upon the hospital as the master, and its medical officers as its servants. The man who pleads malpractice must elect whom he will proceed against, and must abide by the result of that trial."

POST-GRADUATE COURSE IN MEDICINE AT THE UNIVERSITY OF TORONTO.

As we before intimated, it is the intention of the Medical Faculty of the University of Toronto to give a post-graduate course of two weeks' duration, commencing in the latter part of May. The course will consist of both didactic and clinical lectures on subjects of general interest to practitioners, and the aim of the staff will be to make their work as practical as possible. A provisional programme has been prepared, and from it we get the following particulars: Drs. L. McFarlane, G. A. Peters, and B. E. McKenzie will take General and Special Surgery; Drs. Graham, McPhedran, W. P. Caven, and Jno. Ferguson, Practice of Medicine; Dr. A. H. Wright, Obstetrics; Dr. J.F.W. Ross, Abdominal Surgery; Dr. Oldright, Sanitary Science; Dr. Jas. M. MacCallum, Therapeutics; Dr. Avison, Materia Medica; Dr. Jas. Thorburn, Life Insurance; Dr. A. Primrose, Surgical Anatomy; Drs. Reeve, Burnham, McDonagh, and J. D. Thorburn, Diseases of Eye, Ear, and Throat; Professor Ramsay Wright, Bacteriology; Dr. John Caven, Pathology; Dr. A. A. Macdonald, Diseases of Children.

Meeting of Medical Societies.

CLINICAL SOCIETY OF MARYLAND.

WM. T. WATSON, M.D., *Secretary.*

Baltimore, December 18th, 1891. The 259th regular meeting was called to order by the president, Dr. Robert Johnson.

Dr. Wm. B. Canfield read a paper on

DUST AS A CAUSATIVE FACTOR IN PULMONARY DISEASE.

The various kinds of dust may be divided into animal, mineral, and vegetable. Opinions differ as to which kinds are most dangerous when inhaled. That which is generated in brush factories is animal and very harmful. Makers of hats, especially felt hats, suffer much from the dust evolved. The vegetable dust that does the greatest and most lasting injury to the lungs is that generated in tobacco factories. This dust has not only a mechanical action, but has also poisonous effects.

It is in connection with the inhalation of mineral dust that the greatest amount of scientific investigation has been made, especially in relation to the diseases called the consumption of grinders, miners, potters, etc. Anthracosis, silicosis, siderosis, chalicosis, tabacosis, and other kindred names, have been suggested to describe a similar condition produced by various kinds of dust. Zenker has handed down the word "pneumo-noxoniosis" to cover all these conditions. The history of these cases is very much alike. They begin with simple bronchitis, which gradually becomes chronic. They are usually non-tuberculous, at least at the beginning; tuberculous complication is only an accident.

When one is exposed to an atmosphere of dust, the contact of this dust with the sensitive nasal and laryngeal mucous membrane sets up coughing and sneezing and much of the dust is expelled, and for a time no harm results; but a continual exposure to this dust causes a congestion of the mucous membrane of the nose and breathing passages, and in time an inflammation of the whole tract, the ciliated epithelium loses its power, and dust finds its way to the ultimate ends of the lung tubules. When the individual is asleep or absent from this irritation, the ciliated epithelium gets rid of a large part of this foreign substance, and the wandering cells may close around some of this dust and try to carry it off or render it harmless by burying it in a lymphatic gland. Much, however, finds its way either through the epithelium or between the cells into the submucous layer, getting into contact with

the connective tissue of the alveoli and by irritation causing a hypertrophy of this tissue and a condition resembling chronic interstitial pneumonia or fibroid phthisis. The general opinion seems to be that the fibroid condition seems to oppose a direct barrier to the growth and multiplication of the bacillus tuberculosis, and in large tracts of lung tissue converted into this material often not a bacillus could be detected. In one case of the author bacilli were found in abundance, and yet two years afterward the man reported himself as entirely well

The color of expectoration is a prominent sign in these cases. In one of the author's cases, a stoker, the expectoration still continues absolutely black at times and always tinged, although it is almost two years since he gave up his occupation. Examination of this sputum under the microscope showed it to contain in abundance carrier cells, which in all cases contained pigments, and in some instances the black crystalline coal could be recognized within these cells. This pigment and foreign material has a tendency to collect at the apices of the lungs, and is only present at the bases when the dust inhaled is excessive in amount and exposure prolonged.

In diagnosis physical signs do not yield as much as the microscope. By the microscope we see the cells containing the dust. In the author's cases (4), râles were heard on auscultation, but nothing marked was obtained on percussion.

The prognosis is good if the man has not worked too long at the occupation. The treatment is to take the patient from his dangerous occupation, when improvement begins at once. Owners of large factories are adopting stringent praphylactic measures in order that they may not lose so many good workmen. The best methods are: (1) To prevent the formation or escape of dust by using wet grinding or by grinding in closed vessels. This is not always practicable. (2) To prevent inhalation of dust by using respirators, etc. But these are uncomfortable and the men remove them at every opportunity. (3) The removal of dust as fast as it is produced by using fans and air shafts. This is by far the best plan. Still further, the following rules should be enforced: (1) Workmen should change their outer clothing after work. (2) They should keep their faces and hands as clean as their work will allow. (3) They should never be allowed to eat in the work-room.

Dr. Randolph Winslow related a case of

ELEPHANTIASIS SCROTI.

J.C., colored, æt. 44, was admitted to the University Hospital, September 7th, 1891, on account of enlargement of the scrotum and perineum. His father died of meningitis and his mother of phthisis. Patient is one of seven children, six of whom died of phthisis. He had measles in childhood, typhoid fever at 21, and gonorrhœa about eight years ago. The present disease began about three years ago, with slight thickening of the tissues of the scrotum, penis, and perineum, the infiltration first showing itself in the skin of the scrotum and increasing slowly until at the time of his admission the scrotum was enormously enlarged and reached one-third of the distance to the knee. There were a number of suppurating sinuses and superficial abscesses in the scrotum and perineum. There was some pain. The tissues of the scrotum were brawny and very little impression could be made on them by pressure. The perineum was composed of similar tissue and was enormously hypertrophied. The skin of the penis was also thickened, but retained its suppleness, and the prepuce could be easily retracted. The patient said that his virile powers were unimpaired. He was a sailor, but had never been much beyond the coast of this country, and had never resided in a tropical country.

Several efforts to detect the filaria sanguinis hominis were unsuccessful. The sinuses were incised and a long incision made in the perineum to relieve tension and allow the lymph and blood vessels to empty themselves. He was placed upon iodide of potassium, as syphilis could not be excluded. He did not improve, and excision of the scrotum and perineal hypertrophy was performed Oct. 1st. The skin and subcutaneous tissues were very dense and thick and freely supplied with blood vessels. The testicles were carefully dissected out and were uninjured. The gap in the perineum was closed with sutures, but there was not sufficient tissue to cover the testicles, hence lateral incisions were made in the contiguous skin and strips of skin dissected up and brought over so as to form a new scrotum. The tension was great and the stitches cut out, allowing the flaps to separate considerably. Healing was effected under about five dressings, and he was discharged well on Nov. 8th, relieved of pain and discomfort, and ready again to resume his ordinary avocations.

Clinical Notes.

CARCINOMA OF THE CARDIAC END OF THE STOMACH.

BY E. E. KING, M.D.

I have pleasure in reporting a case that occurred in my service at the House of Providence which, if my judgment is correct, is one of extreme rarity. The history is exceedingly brief, which will also add interest to the case. Mrs. McC., æt. 77, been in the institution since Jan., 1891. She was not admitted on account of any illness, but to give her a comfortable home. Her symptoms have been few and of no special moment; simply complaining of headaches and a pain in the left heel. Appetite has been fair; rarely she vomited, never with blood. Two weeks prior to her death, she had a severe hemorrhage from the bowels of dark coffee ground color; it ceased without treatment within twenty-four hours; two slight hemorrhages during the next ten days. Three days prior to her death another hemorrhage, similar in character, occurred, and to this was my attention first drawn; I looked on it as coming from the bowel, and adopted treatment

for such, but without result. She died on the third day.

Post mortem: The stomach was found to be the seat of carcinoma, in its lesser curvature, at the cardiac end. It was about as large as a Mexican silver dollar, forming a well-marked cup-shaped ulcer, with sharp, clear-cut edges. There appeared to be a strip of healthy mucous membrane between the edge of the ulcer and the œsophagus. There was no narrowing of the œsophagus; large numbers of secondary deposits were found in the liver. No other organ was found involved.

Remarks: The occurrence of carcinoma of the cardiac end of the stomach is denied by Fagge, and suggests that all these cases arise in the œsophagus and spread to the stomach. The *post mortem* appearance in this case would strongly hold one to the opinion that this is a true case of cancer of the cardiac extremity. Welsh says that out of 1,300 cases of cancer of the stomach analysed, eight per cent. were of the cardiac extremity. The absence of symptoms is one that must strike all, since the disease must have existed for a long period, but the situation favors freedom from pain, the irritation being almost *nil* at this point. The hemorrhage and its character are peculiar, and fatal hemorrhage only occurs in twelve per cent. of these cases. The advanced age of the patient, the freedom from symptoms, and the discovery of the disease on the *post mortem* table, all go to make this case of peculiar interest.

Book Reviews.

A History of Medical Education from the most remote to the most recent times. By Dr. Theodor Puschmann, Public Professor-in-Ordinary at the University of Vienna. Translated and edited by Evan H. Hare, M.A. Oxford, F.R.C.S. England, L.S.A. London. London: H. K. Lewis, 136 Gower Street. Toronto: J. A. Carveth & Co.

The author of this very interesting book has endeavored to give a systematic exposition of the history of medical education in all ages and in all countries. He refers to the methods of healing in the earliest times, and the formation of medical craft founded on empirical methods. In reference to India, the first country he deals with, he says: "The roots of our civilization lie in the east. On the banks of the Ganges, on the plains of Egypt, and in sea-girt Greece, thousands of years ago, arts and sciences flourished and attained a remarkable development. The healing art there also celebrated its earliest triumphs. It was in India at first practised by the priests, who there, as elsewhere, passed as the treasurers of all knowledge, human and divine." Gradually a distinct medical class was developed, and systematic rules and methods in teaching were recognized. The author refers to old medical works in Sanscrit literature, including commentaries by Charaka and Susruta. Charaka, in those ancient times, gives advice that might well be considered by modern surgeons, such as the following: "Never should even the wisest become puffed up with his wisdom. Many recoil even from a man of skill if he loves to boast. And medicine is by no means easy to learn; therefore let each one practise himself in it carefully and incessantly." The evolution of the practice of medicine in other countries is described in the following order: Egypt, Palestine, Persia, Greece, Rome. The rest of the work comes under the following heads: "Medical teaching in the middle ages, in recent times, and in modern times." On the last page we find the following quotation: "The most precious capital of states and of society is man. Every individual life represents a definite value. To preserve, to maintain it intact, as far as possible, up to the unalterable limits of its duration, is not only a precept which humanity teaches; it is the duty of every commonwealth in its own peculiar interest." With reference to this the author says: "In these words the Crown Prince Rudolph of Austria, unhappy in his early death, struck the keynote of a policy which sounds like the evangel of times to come." The book as a whole, from beginning to end, is replete with matter which is both useful and interesting, and, at the same time, presented in a graceful and charming style.

History of Circumcision: Moral and Physical Reasons for its Performance. By P. C. Remondino, M.D. Philadelphia and London: F. A. Davis, 1891.

Although one may be startled at reading that the prepuce has outlived its usefulness, and that

to be uncircumcised is to be uncivilized, yet, after the perusal of this work, one must certainly confess that the author has made a very strong argument for the more frequent performance of circumcision as a matter of personal hygiene, and as preventive of many forms of disease. Interesting throughout, the book may be recommended as a most exhaustive exposition of the subject of circumcision.

Essentials of Physiology. By H. A. Hare, B. Sc., M.D., Prof. of Therapeutics and Materia Medica in Jefferson Medical College, Philadelphia.

The third edition of this work has been much improved by the addition of some excellent plates from Arnold's "Icones Nervorum Capitis." The general text is of little more value than that of other books of the kind. If a student is unable to discover the "important points" or to "formulate ideas" when reading a standard work on physiology, he will be much less able to remember the ideas when formulated for him by another.

A Complete System of Gynecology and Obstetrics, with 869 new illustrations based upon translations from the French of Pozzi, Auvard, and others, revised by Chas. Jewett, M.D., bound in leather or half morocco, $8.00. *Flint's Condensed Complete Encyclopedia of Medicine and Surgery*, arranged upon a new system, and embodying the various methods of treatment employed by eminent practitioners; the result of a year's labor of a large corps of writers. Leather or half morocco, two volumes, $8.00 per volume. The above works sold by subscription. Also in press, ready March 1st, *The Electro-Therapeutics of Gynecology*, by Augustin H. Goelet, M.D. Cloth bound, $2.50. New York: J. B. Flint & Co., publishers.

Wood's Medical and Surgical Monographs for Nov., 1891, contain The Practice of Hypnotic Suggestion; an elementary hand-book for the use of the medical profession, by Geo. C. Kingsbury, M.A., M.D.; and a Practical Manual of the Bacteriological Analysis of Water, by Dr. Miquel.

Personal.

AT the annual meeting of the Huron Medical Association, held in Seaforth, Jan. 5th, the following officers were elected: President, Dr. H. R. Elliott, of Brucefield; vice-president, Dr. P. Macdonald, M.P., of Wingham; secretary, Dr. W. Gunn, of Clinton.

DR. GEORGE ORTON, of Winnipeg, ex-M.P. for Centre Wellington, has taken the practice of his late brother, Dr. Richard Orton, of Guelph.

DR. HAGERTY, who left London, Ontario, in 1877, for Portage La Prairie, Manitoba, where he resided for many years, died recently in California.

Therapeutic Notes.

ZANE (F.M.) ON PHENACETINE IN WHOOPING COUGH.—Phenacetine, in the author's experience in the treatment of whooping cough, gives more satisfactory results than any other remedy. It robs the disease of half its terrors, the spasmodic cough is less frequent and severe, febrile phenomena and serious complications are rarely present, and the disease runs a much milder and shorter course. To an infant four days old he gave half a grain every two hours to control a severe spasmodic cough, but the cough continued to increase in severity until the child had clonic convulsions, when he gave one grain every two hours. The spasms ceased, the cough improved, and the child recovered. The medicine was continued in this case for two weeks, at intervals of two, four, and six hours, according to severity of cough. He usually prescribes from half a grain to two grains every two, four, or six hours, according to age and urgency of the symptoms. It is best given dry on the tongue, followed by a little milk, or, in case of an infant, let it nurse immediately after placing the powder in its mouth—*Kansas City Med. Record*, October, 1891.—*Epitome.*

SUBCUTANEOUS INJECTIONS OF STRYCHNINE IN TEN CASES OF CHRONIC ALCOHOLISM.—Dr. Erglóski has published an account of ten

cases of chronic alcoholism among his patients. They had the habit of taking brandy. They were given subcutaneous injections of nitrate of strychnine, and one-sixtieth to one-twentieth of a grain at each injection. After a dozen injections the results were remarkable, as they all acquired a distaste for brandy. In such cases as are desirous of being cured, this treatment may prove to be of assistance.—*Boston Med. and Surg. Jour.—Med. Age.*

CODEIN AND HYOSCINE IN PARALYSIS AGITANS.—Dr. Frederick Peterson publishes a clinical study of forty-seven cases of this disease. In the majority of his cases it developed between the ages of fifty and sixty, more men being affected than women. Codein in doses of two grains, combined with hydrobromate of hyoscine, doses of 1-100 of a grain, is recommended to be given two or three times a day.—*Med. Age.*

BROMIDROSIS.—In bromidrosis of the feet, a writer in the *Therapeutische Monatshefte* recommends the following:

℞.—Acid. salicylic.
Aluminis.
Pulv. oryzæ . aa ℥ss.
M.

Sig.—To be sprinkled in the shoes and stockings every morning.

This will act better if the feet are first washed with a three per cent. solution of chromic acid.

PAPOID IN DIPHTHERIA.—We find the following in *The Prescription:*

℞.—Papoid . . gr. x.
Aquæ . . . ℥ ss.
M. f. solution.

Kohts and Asch painted diphtheritic membranes with this solution every fifteen or twenty minutes with a soft brush. They found that the oftener the application was made the more rapidly membranes disappeared. Kohts treated several hundred cases by this method with the greatest success.

℞.—Papoid . . . ℥ ij.
Beta-naphthol . . gr. iij.
Acid hydrochl. dil. . gtt. xv.
Aq. destil. . . ad ℥ iv.
M. ft. solution.

Sig.—Use carefully and thoroughly by means of hand atomizer every half hour on throat and through nostrils on posterior nares and pharynx, if deposit extends to these localities. Papoid solutions should be made fresh daily.—*St. Louis Med. Jour.*

Miscellaneous.

THE PAN-AMERICAN MEDICAL CONGRESS IN THE UNITED STATES OF COLOMBIA.—Pursuant to nominations by Dr. Pedro M. Ibanez, of Bogota, member of the International Executive Committee for the United States of Colombia, the following organization of the Pan-American Medical Congress has been effected in that country: Vice-President, Dr. Pio Rengifo, New York; Secretaries of Sections—General Medicine, Dr. Ignacio Guterrez Ponce, Paris; General Surgery, Dr. Rafael Rocha Castilla, Bogota; Military Medicine and Surgery, Dr. Abraham Aparicio, Bogota; Obstetrics, Dr. Joaquin Maldanado, Bogota; Gynecology and Abdominal Surgery, Dr. Jose M. Buendia, Bogota; Therapeutics, Dr. Manuel Plata Azuero, Guaduas; Anatomy, Dr. Joan D. Herrara, Bogota; Physiology, Dr. Antonio Bangas Vega, Bogota; Pathology, Dr. Nicolas Osorio, Bogota; Diseases of Children, Dr. Antonio Gomez Calvo, Bogota; Ophthalmology, Dr. Proto Gomez, Bogota; Laryngology and Rhinology, Dr. Luis Fonnegra, Bogota; Otology, Dr. Carlos Esguerra, Bogota; Dermatology, Dr. Daniel E. Coronado, Bogota; Orthopædics, Dr. Juan E. Manrigue, Bogota; Naval Hygiene and Quarantine, Gabriel I. Castaneda, Bogota; General Hygiene and Demography, ——————; Mental and Nervous Diseases, Dr. Pablo Garcia Medina, Bogota; Oral and Dental Surgery, Dr. Guillermo Vergas Parrdes, Bogota; Medical Pedagogics, Dr. Jorge Vargas, Bogota; Medical Jurisprudence, Leoncio Barrets, Bogota; Auxiliary Committee (each member being the official representative of the Congress in his respective city), Drs. Nicolas Osorio, Andres Posada Arango, Jorge E. Delgado, Eugenio de la Hoz, Domingo Cagiao, Jose Manuel Rodrigues, Paulo Emilio Villar, Felix M. Hernandez, Rafael Calvo, N. Ribon, Nilceades Castro, Cayefano Lombana, Jose M. Martinez, Isaias Saavedra, Severo Forres, N. Villa, Evaristo

Garcia, Miguel Caicedo, Emilio Villamizar.

The following medical societies have been elected as auxiliaries of the Congress, viz.: Academia Nacional de Medicina, Academia de Medicina de Medellin, Sociedad de Medicina del Canca. The following medical journals have been designated as official organs of the Congress, viz.: *Revista Médica*, Bogota; *Revista de Higiene*, Bogota; *El Agricutor*, Bogota; *Boletin de Medicina del Canca*, Cali; *Andles de la Academia de Medicina del Medellin*, Medellin. The expressed wish of the profession of the United States of Colombia is for a date of meeting during the Columbian Exposition.—CHAS. A. L. REED, Secretary-General. Cincnnati, January 17.

THE INTERNATIONAL EXECUTIVE COMMITTEE OF THE PAN-AMERICAN MEDICAL CONGRESS.—The Committee on Organization of the Pan-American Medical Congress at its meeting at St. Louis last October elected the following International Executive Committee: The Argentine Republic, Dr. Pedro Lagleyze, Buenos Ayres; Bolivia, Dr. Emelio Di Tomassi, La Paz; Brazil, Dr. Carlos Costa, Rio de Janiero; British North America, Dr. Jas. F. W. Ross, Toronto; British West Indies, Dr. James A. De Wolf, Port of Spain; Chili, Dr. Moises Amaral, Santiago; United States of Colombia, Dr. P. M. Ibanez, Bogota; Costa Rica, Dr. Daniel Nunez, San José; Ecuador, Dr. Ricardo Cucalon, Guayaquil; Guatemala, Dr. Jose Monteris, Guatemala Nueon; Haiti, Dr. D. Lamoshe, Port au Prince; Spanish Honduras, Dr. George Bernhardt, Tegucigalpa; Mexico, Dr. Tomas Noriega, City of Mexico; Nicaragua, Dr. J. I. Urtecho, Grenada; Peru, Dr. J. Casamira Ulloa, Lima; Salvador, Dr. David J. Guzman, San Salvador; Spanish West Indies, Dr. Juan Santos Fernandez, Havana; United States of America, Dr. A. Vander Veer, Albany; Uruguay, Jacinto De Leon, Monte Video; Venezuela, Dr. Elias Roderiguez, Caracas.

Hawaii, Paraguay, Santo Domingo, the Danish, Dutch, and French West Indies are not yet organized. Nominations of local officers have been received from a majority of all the members of the International Executive Committee, and a number of the lists have been confirmed by the Committee on Organization. These will be announced as rapidly as acceptances are received.—CHARLES A. L. REED, Secretary-General. Cincinnati, January 15th, 1892.

ELEVENTH INTERNATIONAL MEDICAL CONGRESS.—At the recent Italian Congress of Internal Medicine, arrangements were inaugurated for the next International Medical Congress, which is to meet in Rome in 1893. The last two weeks in September would be the best time for the meeting. Baccelli has been made chairman of the Organizing Committee; Maragliano, general secretary. There will be twelve sections represented respectively as follows: Anatomy, Antonelli; Physiology, Albini and Albertoni; Pathology, Bizzozero and Foà; Pharmacology, Cervello; Clinical Medicine, Baccelli, Maragliano, Murri, and Bozzolo; Surgery, Bottini; Obstetrics, Morisani; Psychiatry, Morselli and Tamborini; Ophthalmology, Devincenzi and Secondi; Dermo-syphilopathy, Campana and Barduzzi; Forensic Medicine, Tamapia; Hygiene, Pagliani, Celli, and Canalis.

CORRECTION.—Hare's "System of Practical Therapeutics." It will be remembered that we gave a favorable review of Hare's admirable "System of Practical Therapeutics" in our issue of January 1st, in which we stated that the work was procurable from Messrs. J. A. Carveth & Co. We are requested by the publishers, Messrs. Lea Brothers & Co., to state that this is an error, and that the work is in the hands of Mr. D. T. McAinsh, of the Canada Life Building, Toronto.

MASONIC PHYSICIANS.—The Grand Lodge of Freemasons in England recently instituted the Æsculapius Lodge, composed of physicians. There has for some time been a lodge of apothecaries called the Galen Lodge.

THE *Buffalo Medical and Surgical Journal* says: It is to be deplored that so many excellent medical journals offend good taste by publishing interleaved advertisements.

A PHYSICIAN of Dakota has been sued for malpractice because, it is alleged, he caused the opium habit in a patient.

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TORONTO, FEBRUARY 16, 1892.

Original Communications.

SURGICAL TREATMENT OF DIPHTHERIA.*

BY GEO. R. M'DONAGH, M.B.,

Physician to the Throat and Nose Department of the Toronto General Hospital and Hospital for Sick Children.

Mr. President and Gentlemen:

In opening this part of the discussion, I cannot help wishing that my experience of the surgical treatment of diphtheria were greater than it has been. However, such knowledge as I have become possessed of, I am pleased to have an opportunity of placing before you, and perhaps, at least, it may evoke a wider range of discussion. I presume I may take it for granted that by the surgical treatment we have reference only to the two operations of tracheotomy and intubation, performed for the purpose of overcoming obstruction to the passage of air through the larynx. I need scarcely allude at all to those cases, sometimes met with, which narrow the glottis space to such an extent that sufficient air cannot enter the lungs to support life. With many physicians the general opinion prevails that when the disease has attacked the larynx, and dyspnœa occurs, in these cases, operative interference should be resorted to early, that is, before the strength of the patient has become reduced, not only by the struggle to obtain air, but particularly by the insufficient oxygenation of the blood. For my own part, while I am strongly in favor of early operations, I think many cases present themselves where a little delay and watching are to be recommended. I believe that in the majority of cases in which the disease attacks the larynx, the first symptoms of involvement of this organ—the hoarseness passing on into aphonia, the croupy cough, and the beginning of dyspnœa—are due to inflammatory or œdematous swelling about the glottis, caused by the diphtheritic poison; and it does not always follow that a deposit of false membrane has already taken place in the larynx. Most of us have seen such symptoms, and the patient recover without the dyspnœa, although severe, increasing to an alarming extent. In such cases a too early operation might not only be unnecessary but injurious. Again, I think while the dyspnœa may be very urgent, if there are indications of separation of the membrane taking place in the pharynx, and particularly if a cast of the larynx has once been coughed up and reformed, we would do well to hesitate, because this must be an evidence that the disease is approaching or has passed the crisis, and the membrane may be again coughed up. Again, we occasionally find urgent dyspnœa due to spasm of the glottis; and, as this condition can generally be relieved by therapeutic treatment, we should try to be sure that there is actual mechanical obstruction to the passage of air which is unlikely to be removed by any efforts of the patient. While, however, I have mentioned these points to urge that all

*Read before the Toronto Medical Society.

reasonable care should be taken before rushing into an operation unnecessarily, the general conclusion I have come to is that just as soon as we are convinced that there is an actual mechanical impediment to the passage of air through the glottis, and that the patient is thereby suffering from deficient oxygenation, we should lose no time in preparing to give surgical relief. The chances of the success of the operation are, I think, vastly improved if it be done early, because the longer the dyspnœa has continued, the greater is the resulting asthenia, and the diminished strength of the patient renders him less able to contend against the disease and less amenable to therapeutic treatment. The asthenia by itself we may be able to overcome, but if it be accompanied by severe dyspnœa, it is usually beyond our power. I do not think that there is any particular stage of the disease when we should operate. I should be guided almost entirely by the breathing in each individual case, rather than by other indications, for it is the effect of the breathing which calls for the operation. The recession of the soft parts of the chest wall, especially the supra-sternal notch and intra-sternal depression, drawing down of the larynx at each inspiration, together with complete suppression of the voice, are valuable indications of the amount of obstruction. If the expiration be as labored as the inspiration, it cannot be due to spasm but only to mechanical obstruction from the presence of a foreign substance. Then I think there is no time to lose, but an operation should be done immediately.

On the other hand, it is very doubtful if an operation should be done when the condition of the patient shows that there is practically no chance of success. A patient may be operated on even at the point of death, if that be due almost entirely to asphyxia, but if due to other causes, then there are contra-indications. As contra-indications, I would consider morbid secondary blood poisoning from the absorption of septic matter in the throat, also severe bronchitis, pneumonia, and extension of the membrane downwards into the bronchi. In such conditions it would be practically useless to do an operation with any hope of recovery. The diphtheria following typhoid fever, scarlatina, and measles is said also to be particularly dangerous; but even in these cases, if there is much laryngeal obstruction, relief will at least be afforded to the patient. In general terms, I believe that the only absolute contra-indication to the performance of tracheotomy or intubation is the absence of laryngeal obstruction. When that exists, I am doubtful if one should refuse relief, and it should be done as early as one is convinced that the obstruction is permanent and is so severe that the blood is being insufficiently aërated.

The next question that arises, if you have decided in favor of some surgical interference, is, which operation should be performed? And here I regret that my own experience of tracheotomy has been so limited. The five or six cases of diphtheria on which I have operated, before intubation was much practised in this city, unfortunately, all died; and since I have instituted intubation, I have been so impressed in its favor, by comparison, that I have quite ceased to do tracheotomy in this disease, except in the occasional rare case in which intubation does not give the required relief.

Among the advantages which intubation seems to possess over tracheotomy, may be mentioned the following: Intubation is much better suited to practice among the poorer people, because the after-treatment is not nearly so important. The child breathing through the tracheotomy canula must be surrounded by an atmosphere carefully regulated as to heat and moisture, and must be attended constantly by a skilled nurse. The after-treatment is, of course, important in intubation, but not nearly so much so as in tracheotomy, and poor patients, living in small houses, are quite unable to supply what is needful in that way. Then, intubation is done without an anæsthetic, and even skilled assistants are not necessary, so that practically no preparation is required. It is done almost in a moment, and there is no injury caused to the soft part, no blood or shock, little or no pain. Then there is no wound to become septicæmic, or to slowly granulate afterwards. Inasmuch as the air enters the lungs after intubation by the natural passages, moist and warm, therefore no change need be made in the surroundings from those best suited when there is no laryngeal obstruction, and the tube does not become plugged

with mucus and require frequent cleaning. There is probably less irritation from an intubation tube than from a tracheotomy canula, and the larynx recovers much more rapidly afterwards. Then there is never the same difficulty in obtaining the consent of the parents, which is often impossible for tracheotomy. And lastly, and of greatest importance, the results after intubation are undoubtedly better.

Of a large number of cases of tracheotomy—over one thousand—collected by Prof. Jacobi from different parts of the world the percentage of recoveries was twenty-one and a half per cent., while the recoveries from intubation are stated by many United States authorities to average between twenty-six to thirty per cent.

After the introduction of the tube into the larynx, the relief from dyspnœa is complete, unless, indeed, the membrane has already extended down the trachea, when relief will be only partial. Partial relief is as rare after intubation as after tracheotomy. There is usually some coughing, caused by the mucus and the presence of the tube, but this soon subsides, respiration becomes quiet, and the child generally goes to sleep, especially if there has been much previous exhaustion. Everything progresses well after the operation for a time, but if the case is going to turn out badly, then we shall observe symptoms of danger within twelve, twenty-four, or thirty-six hours, the most important of which is increased frequency of the respirations. From eighteen to twenty immediately after the operation, they will increase up to forty, fifty, or sixty in a minute, the pulse and temperature generally going up at the same time. The symptoms almost certainly indicate either extension of the membrane downwards into the bronchi, or pneumonia, and in either case the prognosis is exceedingly grave. The physician should give no encouragement until forty-eight hours, at least, have passed, when, if the general condition is favorable, the prospects are good.

The most common termination after both intubation and after tracheotomy is extension of the membrane downwards, and the result in that event is usually fatal. After intubation the same treatment should be carried out as if the tube were not in the larynx. There should be no change, on account of the tube, of the the atmosphere of the room. Indeed, I think the air should only be moderately warm and moist, say about sixty-five or seventy degrees Fahrenheit, and especially should it be fresh and pure. According to my experience, the greatest difficulty to contend with after intubation is the feeding. The tendency of the food, especially fluids, is to run into the tube and cause coughing. The epiglottis, it is generally admitted, is not the means by which food is prevented from going into the larynx; patients can swallow perfectly well without an epiglottis. The sphincter action of the muscles of the upper opening of the larynx is, I think, almost the only means of preventing food from passing into the air passages, and this action is prevented by the tube almost, although not quite entirely. The best kind of food, therefore, for patients with an intubation tube in the larynx, is semi-solids—firm jellies, custards, ice cream, sago, tapioca, etc. Fluids are best swallowed, in the majority of cases, if taken while the child is lying on its chest with the face directed towards the floor. The increased effort at swallowing thus seems to suffice to carry the fluids over the larynx. Some children can swallow fairly well; but with others, at every attempt the fluid runs down the tube and sets up a coughing spell. If this is the case, I would recommend that the child be fed either by enemata, or, better still I think, by passing a catheter into the œsophagus at regular intervals and feeding through it. The great danger of the food passing into the trachea is that it may set up septic pneumonia, as well as favor the extension of the membrane by irritation; and as that danger is very considerable, every means in the way of feeding should be taken to avoid it. Then again, sometimes in a violent fit of coughing the tube may be coughed out. If such a fit of coughing occurs, the nurse should be instructed to raise the child to a sitting posture, where it can cough easier, and if the tube is ejected it is less likely to be swallowed. Then, if there should occur a choking spell from a piece of membrane getting into the tube, and the child seems about to suffocate, the nurse should take it by the feet and shake it with the head downwards, giving it at the same time a sharp blow on the chest, which will help it to eject the tube.

With regard to the ultimate removal of the

tube, no rule can be laid down. Sometimes, owing to obstructions lower down, it requires to be removed on the second or third day, but if all goes well and there is no evidence of increased respiration or pulse, generally about the fourth day will suffice.

When there is obstruction in the pharynx, sufficient to interfere with respiration, from great abundance of membrane, enlarged tonsils, etc., surgical treatment might be required in such cases, but I propose to restrict my remarks to that which may be called for in the laryngeal complication. The points which seem to me to require some consideration are: (1) When should one of these operations be performed in a case of diphtheria? (2) Which operation should be chosen? (3) I shall refer to some points in after treatment, particularly of intubation, and, lastly, a word as to the time of removal of the tube. The usual condition which gives rise to the necessity for an operation is the deposit of false membrane in the larynx, but, on the other hand, it may remain in with safety even seven, or eight, or ten days. One must judge from each individual case. If the child can swallow fairly well there need be no hurry in removing the tube, provided always that the breathing is free. There are also cases when, owing to great difficulty in swallowing, it is judicious to remove the tube every day for a few hours to allow of considerable nourishment being taken, when, if the dyspnœa recurs, the tube may be again inserted.

TREATMENT OF DIPHTHERIA.*

BY W. J. GREIG, M.B., TORONTO.

In entering on the discussion of the treatment of diphtheria, it will be necessary to say a few words in reference to etiology. The previous speaker has told us that the disease is due to the presence in the throat of the Klebs-Lœffler bacillus. In this connection, with a view to intelligent treatment, I desire to call attention to a few facts.

(1) The bacilli do not enter into the tissues and circulate through the blood, but live in the mucous membrane. They will live on any mucous surface, and even on an abrasion of the skin.

*A paper read before the Toronto Medical Society.

(2) The action of the bacilli on the mucous membrane results in the production of a very powerful toxic substance which is absorbed at the seat of its production by the glands and vessels and circulated through the system. It is among the most deadly poisons known. Roux and Yersin stated that $\frac{4}{10}$ of a milligramme injected hypodermically will kill eight guinea pigs. When injected under the skin it produces all the changes which are found to occur in the different organs of the body in diphtheria. This is the agent which produces the most important of the symptoms and sequelæ of the disease. Chemically, it is not a ptomaine or toxin, but it is a proteid substance and allied to the albumins.

(3) In this disease, many other varieties of bacteria are found in the throat, the chief of which are the pseudo diphtheritic bacillus and the pus-producing micrococci, viz., streptococcus pyogenes and staphylococcus pyogenes. The pseudo-diphtheritic bacillus resembles very closely the genuine bacillus, but is innocent in its results. The micrococci are absorbed into the tissues, causing several of the complications and assisting to produce sepsis. They cause the swelling, œdema, and the occasional suppuration of the glands of the neck. They also cause the ulcerative endocarditis, the erysipelas, and the serous inflammation which sometimes occur. In the act of inspiration they may be sucked into the ultimate lobules of the lung and produce lobular pneumonia.

(4) The pseudo membrane is thrown out by the tissues as a result of the irritation produced by the bacilli. As the membrane increases in thickness, the bacilli are carried outwards, so that on microscopical examination, the external layers contain in its meshes large numbers of the bacilli, while none are found in the deeper layers or in the subjacent tissue.

(5) A lesion of the mucous membrane, while not necessary for an attack of diphtheria, strongly predisposes to it. It gives the bacilli a foothold and affords the better opportunities for the absorption of the toxic element. Thus, those suffering from catarrh, sore throat, or hypertrophied tonsils, are more apt to take the disease. These facts are very important from the point of view of treatment as we shall see later.

We must remember, moreover, that a variety of causes will produce membrane in the throat aside from the Klebs-Lœffler bacillus. The pseudo-diphtheritic bacillus and the micrococci will cause a membrane; also any strong irritant or caustic; and scarlet fever and measles are sometimes accompanied by this condition. It is extremely difficult to diagnose between these different forms. It is beyond the purpose of this paper to discuss diagnosis, but I desire to say that the only positive method is by the microscope, the discovery of the Klebs-Lœffler bacillus.

Again, Dr. Macdonnel, of Montreal, a few years ago, drew attention to the absence of the knee-jerk in many cases of diphtheria. He cited instances to show that it might be absent at the beginning of the throat symptoms, and that it might be present until the third week, when it disappeared. This is a valuable point in diagnosis, as well as prognosis. Excluding then other possible causes of the phenomenon, the absence of the knee-jerk in throat cases is positive evidence of the presence of the true diphtheria. Its presence has no significance. The absence of the knee-jerk shows us that the nervous system is already attacked, and that in all probability we will have a severe case to deal with. Always study carefully the condition of the temperature and pulse, especially the latter. It will give us most valuable information of the severity of the case we have to deal with, and the probable result. If the pulse is rapid, but strong from the first, and continues so with only a gradual variation, the result will be favorable if we manage our case properly. If, however, a high temperature and rapid pulse at first are followed by a decided fall, we might consider our patient as progressing favorably, and perhaps out of danger. But these are treacherous cases. The fall may be due to the depressing effects of the poison circulating through the system, and we may have a long, tedious, and perhaps fatal case before us. If the pulse is intermittent and irregular from the first, every effort on our part will be needed to produce a favorable result. With these facts before us, what can we do in the way of treatment? Our object must be twofold:

(1) Support the strength by foods and stimulating medicines. Give plenty of milk and eggs, soups, meat broths, etc. If the appetite is good, solid food may be taken, if the condition of the kidneys allow. But how often it is almost impossible to get a child to take nourishment. If it is a constant fight with the child, resort to rectal enemata of peptonized foods without delay; you can support the strength very satisfactorily in this way. In medicine, iron is given more than any other drug. The combination I prefer is equal parts of tr. fer. mur., glycerine, and old whisky. The glycerine is important. Dosage will vary with the age of the patient, the severity of the disease, and the effect produced. Sometimes iron will upset the stomach and produce nervous symptoms, such as headache, etc. Here we lessen the dose, or discontinue it altogether, depending entirely on the stimulation with whisky. If any sign of weakness occurs in the pulse, use am. carb. digitalis, or turpentine. A good deal has been written about the use of perchloride of mercury in these cases. It is given in large doses, reaching sometimes as high as half a grain per diem, and it is claimed with good results. One writer states that, being a hepatic stimulant, the liver excretes more of the poison from the system. Personally, I fail to see what the therapeutic indications are for its use. It is contra-indicated by the fact that it is a heart depressant.

(2) To prevent the production and absorption of the poison produced by the bacillus, and the absorption of the other forms of bacteria. This is accomplished by local antiseptic treatment. The best agent for the latter purpose is hydrogen peroxide. It has the property of oxidising many organic compounds. It will undoubtedly dissolve the membrane, but this is a dubious advantage, in view of the fact that it usually returns. Its chief use is in ridding the throat of the micrococci and other organic elements and thus prevents the complications of the disease as noted before. It has no action on the Klebs-Lœffler bacillus. To rid the throat of these, two agents stand pre-eminent. The perchloride of mercury can be used as a gargle or spray in a strength varying from 1-8000 to 1-15000 according to the case. Lœffler states that 1-10000 will kill the bacillus in the laboratory, but they must be exposed to its action for at least a minute. Many clinical workers report good results from its use, while

others state that it has no effect. When we remember how much of this drug a patient will take internally, it appears to me that we might safely use stronger solutions. One grain in ten ounces is about 1-5000. We would not be likely to use ten ounces of gargle or spray in twenty-four hours. Whatever strength we use, it must not irritate locally. If it does, we are doing harm. 1-10000 is the strength generally used, and is that recommended by Jacobi and Lœffler.

Another therapeutic agent of which we have heard a good deal lately is chlorine water. Lœffler states that 1-1100 is germicide. It is used, however, pure and may be applied in that way with a brush to the pseudo-membrane and to the adjacent mucous membrane in order to kill the bacilli; afterwards a weaker solution as a spray or gargle frequently, alternating with the hydrogen peroxide. I believe it to be a very useful application.

A new method of treatment, called the "Sub-membranous," has lately been introduced in New York. It consists in the injection of chlorine water into the tissue beneath the pseudo-membrane. Its advocate claims remarkable success, and it is being tried extensively in the United States. My opinion is that it is based on wrong principles, but we will wait and watch. At any rate it emphasizes chlorine water as an antiseptic. The barrel of a hypodermic syringe with a long stem and four or five needles at the end of the stem are used for its administration.

In nasal diphtheria we have the disease to treat under more difficult conditions. Owing to the large mucous surface exposed, there are greater possibilities of toxic and septic absorption. Therefore, whatever else we may do, we must keep the passages clean to prevent this process going on. The nasal douche with a fountain syringe is recommended by Loomis, and is undoubtedly the best form. 1-100 carbolic may be used. Sprays are not powerful enough and applications are out of the question. Use also the other antiseptic solutions if possible, but their importance is secondary to that of cleanliness.

In laryngeal diphtheria there is less danger of septic trouble, and treatment consists in keeping the air passages open and preventing mechanical obstruction to respiration. Sublimed calomel and the vapor arising from slaking lime have been used successfully, but cannot be depended on. If the patient is old enough to allow us to make application to the vocal cords of a solution of papoid, and if extension downwards does not occur, in that way we may prevent obstruction. But we must always be prepared to use mechanical means if necessary to accomplish this purpose. The complications of the disease are to be treated exactly as the same pathological states would be under different conditions; always bearing in mind the necessity of keeping up the strength of our patient by every means possible and especially by free stimulation. During convalescence, advise perfect rest. There is constant danger of heart failure, and there is no method by which we can foresee it.

One word in reference to the pseudo-membrane. Treatment has been directed to it since since the disease was first recognized. It has been torn off with forceps. The actual cautery has been used for its destruction. Strong caustics have been applied. The therapeutic atmosphere seemed redolent with the idea that the membrane was not the disease, notwithstanding the fact that clinical evidence had shown time and again that if removed it was certain to return. We sincerely hope that better knowledge of the etiological and pathological conditions may result in more rational methods. Microscopic examinations have shown that the bacilli are found only on the surface and in the superficial layers. The bacilli in the surface may travel to healthy mucous membrane and set up irritation there. Treatment should be aimed chiefly at the healthy mucous membrane to kill the bacilli there and thus prevent the formation of the poison. We believe the membrane to be protective, rather than otherwise. It is an effort on the part of nature to protect itself against the attacks of the disease. Excepting the surface, the membrane is best let alone until it finally separates in a natural manner, very much in the same way as a scab is thrown off by the healing of the tissues beneath. This separation can be assisted by the use of hot applications externally. These remarks apply with special force to the tonsils, which are such free absorbents, owing to

their lymphoid structure. If membrane covers them beyond keeping it clean, leave it alone; it is protective. If they are not covered by membrane, let the full force of our antiseptic applications be directed to them to prevent the bacilli obtaining a foothold.

Selections.

TO WHAT EXTENT IS THE DIAGNOSIS OF PREGNANCY POSSIBLE IN THE EARLY MONTHS?

BY CHARLES JEWETT, M.D.

Read before the Medical Society of the County of Kings, October 20th, 1891.

The most conclusive evidence of pregnancy in the first three months is to be found in the pelvis. Naturally, the earliest and the most significant effects of utero-gestation upon the maternal economy are to be looked for in the uterus itself. And it is of these that it is the principal object of this paper to speak. They begin with the fixation of the impregnated ovum, and are for the most part progressive throughout the entire period of gestation. The changes available for our purpose are the changes in the size, shape, and consistence of the uterus.

Size.—The uterus grows with the growing ovum, and practically at a fixed rate throughout the nine months. It is well known, however, that at the time when the growth first becomes easily perceptible, notably in the second month, the enlargement of the uterus is chiefly in its lateral and antero-posterior diameters. The length at this time is but little increased. This is what would be naturally expected when we remember that in the non-gravid state the anterior and posterior walls lie in contact. The beginning development of the egg has the effect to lift the uterine walls apart and to round them out, the ordinary length of the cavity being sufficient to accommodate the growth of the first few weeks. In course of the third month the growth begins to be an all-round growth. True, the enlargement of the uterus in the first and second months is not solely the mechanical effect of the growing ovum; it is in part due to the increased physiological activity of the uterine structures.

Shape.—The shape of the gravid uterus is practically that impressed upon it by the globular ovum growing within its cavity. The first change in shape, then, is a bellying of the anterior and posterior walls of the body of the uterus. To the touch the bellying is usually most accessible in front; it is most appreciable in front, for the further reason that the anterior surface of the non-gravid uterus, especially in the nullipara, is flattened, while the posterior surface is somewhat convex. The lateral borders also begin to be rounded out. In the non-gravid uterus, especially of the nullipara, the inferior segment—that part immediately above the cervix—will be found much narrower than the fundus above or the cervix below. Since it is in this part of the uterus that the ovum is lodged, the first effects of the developing ovum upon the shape of the uterus are readily perceived in the lateral as well as the anterior expansion of the corpus uteri. The changes in contour are well developed in course of the second month, and the shape at this time is in notable contrast with that of the healthy nulliparous organ. At the end of the eighth week, or soon after, a cross section of the uterine body, midway between the isthmus and the fundus, is almost a perfect circle.

Consistence.—The uterine structures begin to soften from the date of conception. This softening is naturally most marked at first in that segment of the organ included between the cervix and the fundus, since this part is in most intimate physiological relation with the ovum. It is in most cases easily appreciable at the fourth week, certainly by the sixth, and is well developed at the eighth. But little experience is required to recognize the peculiar compressibility and resiliency of the uterus, which contains a living ovum in the latter part of the second month.

I may mention here a practical point upon which I have been accustomed to rely for the recognition of this sign. In the healthy non-gravid condition the mesial section of the lower segment of the uterine body is notably denser than the lateral sections. The softening which characterizes the gravid uterus is most readily detected in this median section. The median ridge disappears, and not only that, but this mesial section of the corpus uteri usually

becomes less dense between the fourth and sixth week than the uterine structures on either side of it. The softening of this portion of the body of the uterus, at a point immediately above the cervix, is the essential fact in

HEGAR'S SIGN.

Hegar's sign, which has become familiar to the profession within the last few years, may best be defined as the compressibility of the isthmus uteri. Its location is the inferior segment of the body at a point just above the cervix, and it is especially marked in the mesial section. To be evidence of pregnancy with a living ovum, this compressibility of the tissues must be accompanied with the normal elasticity. While the compressibility of the isthmus is not equally well developed in all cases, it is always present in some degree during the second month, and when well made out is less liable to fallacy than most other signs of this period. It will be better understood in connection with Hegar's method, which will be described below.

Technique of pelvic examination.—Little need be said with reference to the method of examination for the pelvic signs of pregnancy. It is frequently impossible to fix and palpate the uterus satisfactorily with a single finger *intra vaginam*. With two fingers slightly separated the uterus may be readily balanced between them and the external hand, and may be explored with ease. The surrounding structures, too, are thus brought within easier reach.

When the fundus cannot be readily tilted forward within the grasp of the outer hand, as is sometimes the case in posterior misplacements, the lower segment may be explored by pressing the external hand down against the uterus in front and carrying the internal fingers well up into the posterior fornix. Again, by the use of the index finger *per vaginam*, and the second in the rectum, the entire posterior surface of the uterus may be reached and explored, as late as the second month and later.

In extreme cases, when the importance of the question is sufficient to justify it, the examination may be made under an anæsthetic, when it is otherwise impracticable by reason of undue thickness or rigidity of the abdominal walls, or other difficulties. Mere muscular rigidity, however, may frequently be overcome by requiring the patient to breathe rapidly, or by gentle manipulation of the abdomen for a few moments, with a view to disarming the reflexes. It may be objected that all this is a troublesome matter, but the best results in practice are seldom reached except by taking pains.

Hegar's method is as follows: The index finger is passed into the rectum and carried just above the utero-sacral ligaments to a point opposite the isthmus uteri. The thumb of the same hand, passed *per vaginam*, rests upon the corresponding point in front of the isthmus. The tissues thus intervening between the thumb and the finger may usually, at about the sixth week or a little later, be compressed almost to the thinness of a visiting card. In difficult cases the rectum may first be distended with water to facilitate the introduction of the finger above the third sphincter, or the examination may be made with the aid of an anæsthetic.

This is Hegar's sign as obtained by his method. I have found no great difficulty, however, in most cases, in demonstrating to my satisfaction the compressibility of the lower uterine segment by the usual bimanual exploration. Forcing the uterus well backward and downward with the outer hand, the isthmus may be readily reached with the fingers of the other hand in the posterior vaginal fornix, and the compressibility or density of the lower segment easily appreciated.

The recto-vaginal modification of the bimanual above described serves the same purpose. The seat of Hegar's sign may thus be more easily explored—though, perhaps, not with the same precision—than by his manipulation. Or again, when the uterus is freely moveable, it may be gently drawn down with a volsella held by an assistant, and the isthmus thus brought within the reach of a finger of one hand in the anterior, and the corresponding finger of the other in the posterior vaginal cul-de-sac.

Causes of failure.—In a small proportion of cases the diagnosis is unfortunately beset with insurmountable difficulties. When all available means are utilized, however, failure can arise only from one or two classes of causes:

(1) Pathological conditions which may mask the pregnancy.

(2) Pathological conditions which simulate it.

In the presence of uterine fibromata, for ex-

ample, the recognition of pregnancy may be quite impossible in the first three months. The same thing may be true, at least in the second month, from other conditions of the uterus which retard the usual changes of density.

Among the morbid conditions which simulate utero-gestation, especially in the second month, are chronic metritis, subinvolution, fluid accumulation in the uterus (hæmatometra or hydrometra), a flexed and hyperæmic uterus, a soft submucous fibroid.

In general, pathological growths are distinguished from gestation by the absence, for the most part, of the signs of pregnancy and by the presence of the signs of disease; moreover, the rate of the growth in pregnancy is unlike that of any other pelvic tumor, and in neoplasms of other organs than the uterus, the latter may be differentiated from the tumor by the touch.

Chronic metritis and subinvolution are distinguished by greater density. Fluid accumulations present the characters of a tense cyst. A uterus containing a soft submucous fibroid may usually be easily differentiated from that of gestation by the history. The same is true of a flexed and hyperæmic uterus. The physical signs in the latter case are frequently misleading, especially the softening and thinning at the point of flexion, but there is a notable absence of the normal elasticity of the tissues. It may be remarked here that the gravid uterus of the early months is by some writers described as doughy. This, I think, is a mistake; resiliency or elasticity is a notable characteristic of the uterus of gestation, so long as the ovum is living.

It will be observed that the morbid conditions which may mislead are not so commonly to be expected in first pregnancies. The diagnosis is less difficult, therefore, in women pregnant for the first time, and in healthy primiparæ may be positively established in every case by the sixth or eighth week, frequently at a still earlier period.

Ectopic Pregnancy.—The possibility of diagnosis in ectopic pregnancy has been the subject of much acrimonious discussion. Great difference of opinion prevails.

It is now generally conceded that with very rare exceptions, all ectopic pregnancies are primarily tubal. The major part of them are seated in the free portion of the tube. Pregnancy in the free portion of the tube ruptures before the fourteenth week—in many cases during the second month. The signs on which we must rely, therefore, for the diagnosis of pregnancy before rupture, when the pregnancy is ectopic, include only those of the first three months. Usually only a portion of these are available, since the majority of cases rupture some weeks before the end of the third month. Furthermore, the uterine signs of normal gestation are not all present in ectopic, and those which are found in misplaced pregnancy are not so fully developed as in normal cases at the same stage. Moreover, the occurrence of extra-uterine pregnancy always implies the existence of more or less pelvic disease, and the pathological conditions which have brought about the ectopic fœtation in greater or less degree embarrass the diagnosis. Similiar complications are comparatively rare in normal gestation.

Tubo-uterine pregnancy, pregnancy in the intra-mural portion of the tube, is more difficult of recognition than that which takes place in the free part of the tube, and for these reasons: If the ovum lodges at the inner end of the oviduct, close to the cavity of the uterus, the enlargement of the uterus is nearly symmetrical, and before rupture differentiation from ordinary pregnancy is extremely difficult or impossible. If the fruit sac is located in the outer segment of the intra-mural portion of the tube, that is, just within the wall of the uterus, at the cornu, the case is difficult to distinguish from pregnancy in the rudimentary horn of a double uterus. Yet in the latter case the distinction is not important, since the treatment is much the same in both.

It must be granted that in extra-uterine fœtation certain additional signs are engrafted upon those of normal pregnancy, but they are usually more or less masked by the results of pelvic disease. Again, it must not be forgotten that in a large proportion of cases the opportunity for diagnosis never presents before rupture.

After rupture, particularly if much hemorrhage has taken place, failure to recognize the state of affairs is rarely excusable. With a patient, however, who has suffered habitually from dysmenorrhœal pains and in whom the

pelvic organs are misplaced and matted together by adhesions, both the symptoms and physical signs may be extremely misleading even after rupture, especially if the symptoms of internal hemorrhage and the usual collapse are nearly or wholly wanting.

Résumé.—The diagnosis of pregnancy in the early months rests upon no one sign, but upon the collective evidence of all the signs.

The most reliable evidence of normal gestation in the first three months is to be found in the changes which take place in the uterine tumor.

In the great majority of all cases of normal pregnancy the signs of the second month are sufficient to establish the diagnosis.

In the absence of pelvic disease, pregnancy may be positively predicated in every case of utero-gestation between the eighth and twelfth week, often at an earlier period.

A ruptured tubal pregnancy, with slight hemorrhage, may pass unrecognized, usually being followed by recovery.

In ruptured tubal pregnancy, with free hemorrhage, the clinical picture is unmistakable.

While the diagnosis is more difficult in ectopic than in normal pregnancy, it is possible in a large percentage of cases.

REPORT OF CASES OF EARLY DIAGNOSIS OF PREGNANCY.

DR. R. L. DICKINSON.—I have detected the changes in the uterus even earlier than Dr. Jewett mentions. Let me give an instance. The patient was a multipara, and on examination exhibited a lacerated cervix, and a uterus slightly enlarged. I examined that case again three weeks after a single coitus, and the uterus presented this shape; I draw the "waist-line" between body and cervix, not because the organ is really thinner at this point, but because it feels so. At the fourth week the uterus is still somewhat firm down the middle, but the ridge is distinctly less dense than before. It persists after the lateral borders have softened. I have found that ridge as late as the eighth week. In my experience, compressiblity, or softening, at the junction of the cervix and the body, is less generally found than the elasticity of the body. After the third week the cervix is found to be the densest part of the uterus.

The most distinctive changes in early pregnancy are bulging and elasticity of the upper part of the uterus. When the bulging is posterior, it is usually very distinct, resembling a ledge.

The main point which I wish to emphasize is, that the elasticity, resiliency, and bulging of the body of the uterus are far more valuable as signs of pregnancy than the compressibility at the junction of the body and cervix (Hegar's.)

DISCUSSION.

DR SKENE.—While expressing my great appreciation of the contributions of the paper and the illustrations, I would like to call attention to three signs of pregnancy, which I think have not been alluded to, and which I consider of great value.

First, in addition to the elasticity or softening of the uterus and its change of form, there comes with that a difficulty of mapping out the uterus. It is exceedingly difficult to outline it in some cases, and that very fact is of great value, because anything else which is likely to simulate pregnancy is more clearly defined, because denser, as a uterine fibroid, subinvolution, a distended Fallopian tube, or an ovarian cyst, for instance. More than that, in the early months of pregnancy the uterus grows out of proportion to its surroundings, and so its mobility, or the facility with which it can be displaced, is lessened. You will find it more difficult to raise a pregnant uterus up out of the pelvis, or towards the superior strait, than in any other condition, than in cases of most—not all—small fibroids which enlarge the uterus, or subinvolution, which does the same thing. This partial fixation is rapidly overcome in the latter months of pregnancy, especially after the third month, when the function of development of the uterine ligaments is taken up and goes on rapidly.

The second sign which I would mention is the color of the mucous membrane of pregnancy, which is different from everything else—nothing simulates it. It is present in a lesser degree in ectopic gestation, but in normal gestation this color of the mucous membrane is not simulated by any marked condition that I know of. That peculiar bluish violet hue, if seen a few times, is easily recognized afterwards, and becomes of the greatest possible value, and

I depend very largely upon it. Of course it requires a careful speculum examination in order to see it, but it is worth the trouble in doubtful cases.

The third sign is the peculiar secretion in the cervix. There is a difference between the secretion in the cervix of the pregnant uterus and that of any other pathological condition. In the pregnant uterus the cervical secretion has a whitish, opaque appearance, that at first sight is very much like the leucorrheal discharge in a case of muco-purulent cervical endometritis, but careful examination proves that it is not, because it contains pus, which gives the opaque appearance, while in pregnancy opacity is due to the coagulation of the albumen by the secretions of the vagina. That is characteristic of pregnancy, and occurs in no pathological condition, and is almost always present. When I find that opaque secretion of the cervix, that peculiar hue of the cervix and vagina, and the other physical signs, I am more positive of the diagnosis in the early months of pregnancy than in the fourth or fifth month, when fœtal motion is present, but, on account of a fatty abdomen, is hard to distinguish.

I meant simply to emphasize the fact that the diagnosis can be made with some degree of positiveness, and if I have emphasized the importance of the diagnosis, then I have done what I most desired to do.

DR. WALLACE.—May I enquire of Dr. Skene at how early a period he can recognize the discoloration he refers to? The paper of the evening took in the first three months.

DR. SKENE.—"Discoloration" is hardly a good name for it; it is a specific color produced by a well-balanced arterial and venous physiological hyperæmia. It begins to develope as soon as the uterus begins to change. I am sure I have noticed it at the end of the first month, so as to recognize it. It increases gradually, the color becomes deeper up to the end of gestation. After the third month it becomes more venous and gives that bluish look which we see in the later months of pregnancy, and, by the way, may be simulated in certain neoplasms. But the sign is apparent from the end of the first month up to three and a half months. It is a most marked characteristic, and I think it unmistakable.

DR JEWETT.—With regard to the points made by Dr. Skene, the fixation of the uterus and the difficulty in mapping it out, as signs of pregnancy, are new to me. The former, possibly, is hardly available in the period with which the paper deals. As to the color of the vagina and cervix in gestation, one of the best contributions we have had to that subject we owe to Dr. Chadwick. In a large number of observations he found this sign in about five-sixths of all cases at the end of the third month.

There is reason, possibly, to assume that the dusky hue of pregnancy may be distinguished from that caused by morbid conditions, if Dr. Chadwick is right. He calls attention to the fact the peculiar coloration of pregnancy is most frequently present and most marked on the anterior wall of the vagina, immediately behind the meatus urethræ, and he considers it not due to mere venous engorgement, such as occurs in disease, but to hypertrophy of the cavernous structures in this region. Yet the appearances in pregnancy and disease are so nearly alike that the distinction is usually difficult.

In reply to Dr. Minard's question, I may say that the point for Hegar's test is the lower segment of the uterus immediately above the cervix.—*Abstract, Brooklyn Medical Journal.*

EXPERIMENTS WITH THE PNEUMOCOCCUS.—At the present time, when pneumonia is exceptionally prevalent, it may be well to recall the investigations conducted last year by Drs. G. and F. Klemperer, and published in the *Berliner Klin. Wochenschrift* in August last. They then detailed experiments, the practical outcome of which may possibly be of real therapeutic importance. It is known that in most cases pneumonia, after having during from five to seven days caused grave general symptoms, terminates abruptly by crisis. At this period there has been little or no change in the state of the lungs, which still remain infiltrated with fibrinous exudation, or in the properties of the pneumococci, which are found in great numbers in the sputa and retain all their virulence. On what, then, does the pneumonic crisis depend? Only one explanation seems possible: the crisis is due to the products of the organ-

isms, which, by their accumulation, modify the soil on which the microbes develope. In their experiments made on rabbits, the investigators observed that any nutritive substance which had served as a culture medium for the pneumococci, even if it had been separated from the microbes by filtration, conferred on the animal immunity against the pneumonic infection. They next proved experimentally that the blood serum of a rabbit "vaccinated" against the pneumococcus may cure an animal infected with pneumonia. An intravenous injection of eight cubic centimetres of serum of an animal rendered refracfory, practised twenty-four hours after the infection, produces a gradual fall in the febrile temperature, and hastens the recovery of the animal. In another series of researches, devoted to the study of the cause of the remedial action of the serum of inoculated animals, the same observers found that the pneumococcus, when introduced into the body of an animal, gives rise to the production of a "pneumotoxine," which may be isolated. This pneumotoxine produces a febrile reaction of several days' duration, after which they have noted in the fluids of the animal another substance, "anti-pneumotoxine," which has the power of neutralizing pneumotoxine. The blood serum of an animal on which immunity has been conferred contains anti-pneumotoxine, and it is this which seems to forward the recovery from the pneumonic infection. In the blood serum of patients affected with croupous pneumonia, they have also found pneumotoxine and anti-pneumotoxine, the former chiefly during the febrile period of the disease, the latter after the crisis. They also claim to have treated successfully rabbits suffering from pneumonia by injecting into these animals blood serum taken from a pneumonic patient after the crisis. Being assured by experiments made on themselves that man may support with impunity, and without any local and general reaction, injections of the serum of animals rendered refractory to Fraenkel's pneumococcus, the investigators treated six patients affected with pneumonia. Although the number treated was small, the result has been very encouraging. In fact, in all these patients a hypodermic injection of from four to six cubic centimetres of serum was followed at the end of from six to twelve hours by a considerable fall in the temperature, with slowing of the pulse and respiration. These observations are especially noteworthy as confirming those made by Emmerich and Fowitzky, who claim that they have conferred immunity on the rabbit by means of hypodermic injections of attenuated cultures of the pneumococcus; but this immunity, they say, is incomplete. On rabbits infected by pneumococci, on the other hand, full immunity is obtained by intravenous injections of a culture having its entire virulence, but largely diluted. The liquid obtained by crushing the organs of an animal thus rendered refractory exercises on the pneumonic infection a sure remedial action when it is injected under the skin or into the abdominal cavity, and especially when it is thrown into the veins of the infected animal.—*Lancet.*

THE HEALTH OF VETERANS, OR TWENTY-FIVE YEARS AFTER THE WAR.—Dr. John L. Billings, of the army, has contributed to *The Forum* for January a brief study of the health of the survivors of the war, as judged by data compiled under the eleventh census. The author's intention is to show with regard to the troops of a single state, Massachusetts, what may at some future time be worked up for the Northern States as a whole. In that state about 40,000 veterans were reported as living on the first of June, 1890. These form about one-eighth part of the white male population over forty years old. Hence, if they were all equally healthy, the number of sickness cases reported by the census should be seven times as great among the latter as among the former. But the census indicates that there is four times as much sickness among veterans as among other males of the same age. Among the insane, however, the veterans furnished a much smaller proportion than the other males over forty years of age. The sickness statistics were especially high among the veterans from diarrhœal diseases, rheumatism, and heart disease. This fact might have been anticipated, and may, in part at least, be set down as one of the entailments of service in the field. Dr. Billings infers that while the health of some men has been improved by their war discipline —even to the extent of the preservation of

lives that would have been lost if their owners had remained at home—the health of the average has been impaired by the exposures of the soldier's life. The veteran has a greater number of days of sickness than other men of the like age-period, and, of course, has a somewhat less expectation of life.—*Journal of American Medical Association.*

DEATHS UNDER CHLOROFORM.—We regret to have to open the new year with a record of four further recent cases of death under chloroform. The first was that of Alfred George Smith, aged 45, a brewer's laborer, of Faversham, who died under chloroform at University College Hospital, on January 6th. Two years ago the deceased, who had cancer of the tongue, underwent an operation at the hospital, when a portion of his tongue and lower jaw were removed under the influence of an anæsthetic. A fresh growth on the roof of the mouth, affecting part of the jaw, having developed, another operation became necessary in order to prolong his life. Dr. Walter Tate, the resident medical officer, by whom the anæsthetic was administered, stated in his evidence before the coroner (Dr. Danford Thomas) that the deceased "took the anæsthetic badly from the start. He breathed with difficulty, and, after a very few minutes, became blue about the face." Witness added that he then stopped the inhalation, and the deceased was removed to the operating theatre, where more chloroform was administered, when his breathing ceased altogether. Recourse was had to artificial respiration, but the deceased never rallied. With the cancerous growth unremoved he could not have lived long in any case. On the first occasion he took the anæsthetic well. Dr. T. Wood, house surgeon, deposed that death was due to asphyxia whilst deceased was under the influence of the anæsthetic. The coroner remarked that it would have been almost impossible to perform so painful an operation without the administration of an anæsthetic. Considering the vast number of patients to whom anæsthetics were necessarily administered, it was marvellous how small was the proportion of deaths—something like 1 in 4,000 or 5,000 cases. A verdict of "death from misadventure" was returned. A further case which formed the subject of an inquest at Guy's Hospital was that of George Clark, aged 50, a laborer. Dr. Reginald Freeland, the house surgeon, in his evidence, stated that he saw the deceased on his admission to the hospital. He was suffering from a simple fracture of both bones of the right leg. The injured limb was put in splints, and on the afternoon of January 7th, as he was unable to get into a satisfactory condition, he administered chloroform to the patient at 5 o'clock. He had only been under its influence for a few minutes (and had taken a small quantity, about half a drachm) when witness noticed that he turned a very bad color and began to breathe heavily. Directly after the witness had stopped giving the chloroform deceased ceased breathing. Witness then resorted to artificial respiration for 2½ hours, and used an injection. The man's heart kept beating all that time, but he never breathed again, and soon died. The *post mortem* examination showed that all the man's organs were perfectly healthy. Death was due to paralysis of the respiratory centre, due to the chloroform. In reply to the coroner, it was stated that it was impossible to have set the leg without the use of chloroform. A verdict of death from misadventure was also returned in this case. A third case was that of a carman, aged 47, admitted to the Middlesex Hospital on December 19th, who had suffered a great loss of blood from the bowel, the cause of which it was necessary to ascertain. Chloroform was administered from a Krohne and Sesemann's inhaler, with respiration indicator (a modification of Junker's) for this purpose. The patient took the chloroform well and passed through the intoxication stage, the face being but slightly congested. About four minutes after, when he had been lifted on to the operating table, the respiration ceased suddenly, the pulse continuing for a time to beat with regularity. Silvester's and Howard's methods of artificial respiration were resorted to, tracheotomy performed and other means tried, but without effect. The *post mortem* examination showed the lungs to be remarkably emphysematous, and the heart infiltrated with fat. A fourth case was that of a shepherd, named M'Laren, of Crieff, between 50 and 60 years of age, to whom chloroform was administered for the purpose of

extracting teeth. The deceased had been suffering from cancer of the tongue, and the teeth had been causing great irritation.—*Brit. Med. Jour.*

A PHYSICIAN'S ESTIMATE OF HIS CLASS.—In Dr. S. Weir Mitchell's interesting "medicated novel," *Characteristics*, that is being published in the *Century*, there is the following description of varieties of medical men that will suggest acquaintances to many of our readers: "There is no place where good breeding has so sweet a chance as at the bedside. There are many substitutes, but the sick man is a shrewd detective, and soon or late gets at the true man inside of the doctor. I know, alas! of men who possess cheap manufactured manners, adapted, as they believe, to the wants of 'the sick-room'—a term I loathe. According to the man and his temperament do these manners vary, and represent sympathetic cheerfulness or sympathetic gloom. They have, I know, their successes and their commercial value, and may be of such skilful make as to deceive for a time even clever women, which is saying a great deal for the manufacturer. Then comes the rarer man who is naturally tender in his contact with the sick, and who is by good fortune full of educated tact. He has the dramatic quality of instinctive sympathy, and, above all, knows how to control it. If he has directness of character to, although he may make mistakes (as who does not?), he will be, on the whole, the best adviser for the sick, and the completeness of his values will depend upon mental qualities which he may or may not possess in large amount. But over and above all this there is, as I have urged, some mystery in the way in which certain men refresh the patient with their presence. I fancy that every doctor who has this power—and sooner or later he is sure to know that he has it—also learns that there are days when he has it not. It is in part a question of his own physical state; and at times the virtue has gone out of him. . . . I had a rather grim but most able surgeon. He seemed to me to have a death-certificate ready in his pocket. He came, asked questions, examined me as if I were a machine, and was too absorbed in the *physical me* to think about that *other me* whose tentacula he knocked about without mercy, or without knowledge that tenderness was needed. Our consultant was a physician with acquired manners. He always agreed with what I said, and was what I call aggressively gentle; so that he seemed to me to be ever saying with calm self-approval, 'See how gentle I am.' I am told that with women he was delightfully positive, and I think that this may have been true, but he was incapable of being firm with the obstinate. His formulas distressed me, and were many. He was apt to say as he entered my room, 'Well, and how are we to-day?' And this I hated, because I once knew a sallow undertaker who, in the same fashion, used to associate himself with the corpse, and comfort the living with the phrase, 'We are looking quite natural to-day.'"—*N. Y. Medical Journal.*

THE following poem was read at the dedication of the Camden City (N.J.) Dispensary, on January 9th, by Hon. Henry C. Bonsell, editor of the *Camden Post*:—

In holy shrine and temple fane
We here assemble once again
To herald on the trump of fame
The Doctors.

As here the Medicos we meet,
And learn new wisdom at the feet
Of those whom we are proud to meet,
The Doctors.

Magicians who our ills assuage,
Who take our pulse and even gauge
Our temperature when fevers rage—
The Doctors.

Who mitigate our many woes,
And patch us up from scalp to toes
With porus plasters 'stead of clothes,
The Doctors.

Who fill our craws with coated pills,
And nasty draughts the de'il distils,
And for it send us swindling bills,
The Doctors.

For which they oft our censure earn,
As with indignant spleen we burn,
But to them we are forced to turn,
The Doctors.

Who, like the fishes, swim in schools,
Scoffing at the paltry fools
Who disregard conventional rules,
The Doctors.

And to this day they can't agree
On tweedle-dum and tweedle-dee,
But all unite upon the fee,
The Doctors.

Yet when we feel we're getting sick,
We send for M.D.'s p. d. quick,
According them the winning trick,
The Doctors.

For when we're in the grip's fell clutch
We're not so proud—not overmuch,
But reach out for the only crutch,
The Doctors.

So, when dread anguish wrings the brow,
Without reserve we all allow,
"A ministering angel thou,"
The Doctor.

And in the hour of sore distress,
The rich and poor alike express
Their fervent thanks, and say, "God bless
The Doctor."

For no respecter of persons he,
Nor purse, nor place, as all agree,
He fighteth for the victory,
This Doctor.

The victory o'er disease and death,
This of his nostrils is the breath,
"This is my mission," answereth
The Doctor.

And many dollars doth he lose,
And many men do him abuse,
Then let's commend to tuneful muse
This Doctor.

The muse recounteth knightly skill,
Then let the muse this truth instil,
And credit pay, and pay the bill
Of the indispensable Doctor.

—*The Journal of the American Medical Association.*

FIVE O'CLOCK TEA.—Here is an extract from an interesting lecture delivered by Sir Andrew Clark, the other day, to the students of the London Hospital: "Tea is a blessed beverage. I do not know what I should do without it. But there is tea and tea; and one of the teas which I have in my mind is the representation of all that is physiologically wicked. I go about town a good deal, holding consultations here and there, and about five o'clock when I get into a place the lady of the house will say to me, 'Sir Andrew, you look so tired, do let me give you a cup of tea.' I say, 'Thank you very much.' But the tea has stood for half an hour; and she remarks, 'I know you do not like it strong, Sir Andrew,' and then she puts about a tablespoonful of tea into the cup and fills it up with water. Now I call it positive cruelty to give tea like that to anybody, and I hope you gentlemen will always set your faces against such a beverage. Tea to be useful should be, first of all, black China tea. The Indian tea which is being cultivated has become so powerful in its effects upon the nervous system that a cup of it taken early in the morning, as many people do, so disorders the nervous system that those who take it actually get into a state of tea intoxication; and it produces a form of nerve disturbance which is most painful to witness. If you want to have, either for yourselves or for your patients, tea which will not injure and which will refresh, get black China tea, putting in the right measure—the old-fashioned teaspoonful for each person, and one for the blessed pot. Then pour on briskly boiling water, and within five minutes you must pour it off again, or it will become wicked instead of good."—*Boston Journal of Health.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, FEBRUARY 16, 1892.

DRUGGISTS AND COUNTER PRESCRIBING IN TORONTO.

The recent sudden death of a woman in Toronto, who was taking medicine prescribed and furnished by a prominent druggist, has caused considerable comment. The physicians of the city have complained rather bitterly for some years about the open violation of our laws by certain druggists. It has been freely stated that the evil has steadily increased from year to year, and that, at the present time, counter prescribing in most, if not all, our drug stores is quite the custom. In the case referred to it happened, fortunately for the druggist, that the medicine was harmless. We have no particulars as to the methods of diagnosis employed by the learned gentleman behind his counter, but we are informed that, in his wisdom, he decided on indigestion, and prescribed pepsin and bismuth. It was seriously and conclusively proved by *post-mortem* examination that the pepsin and bismuth were not the cause of death. Many would have admitted the probability of such a verdict even without the *post-mortem* evidence.

The druggist in question is either a careful prescriber or he was in rare luck on this particular occasion. If he had prescribed some good round doses of antipyrin, or some such remedy, in accordance with the custom of many of these unlicensed and self-constituted medical practitioners, he might now be placed in a peculiarly unpleasant position, to put it mildly. But our learned friend only prescribed pepsin and bismuth. They might do good, and they could scarcely do harm; therefore, according to the views of some, this indigestion diagnosticator was quite a safe man as far as the public are concerned. We cannot cordially endorse such views, however, inasmuch as we are inclined to think that even this apparently safe pepsin and bismuth therapeutist might be a possible source of danger to his trustful and confiding patients.

Indigestion is what one of our American friends once called "a mighty good diagnosis, you're pretty safe with it every time." There is sometimes, however, a danger of complications. We know nothing about particulars in the case referred to, excepting what we have learned from the daily papers. Their report was that the woman had suffered from *la grippe* for some time, and was much weakened by it. The *post-mortem* examination is said to have shown disease of internal organs, especially the kidneys. With our imperfect knowledge of the facts of the case, we do not propose to discuss it in detail, but the simple statement tha a druggist had the assurance to take charge of a patient who was seriously ill is a very serious one.

Is it possible that conduct so infamous and so dangerous is quite common among the druggists of Toronto and other cities in Canada? If so, we are quite in accord with those who think that the Ontario Medical Council ought to put a stop to such iniquitous and lawless acts. Such an endeavor on their part would be much more popular with the profession than the imposition of the two dollar tax.

HOSPITAL FOR INFECTIOUS DISEASES IN TORONTO.

The Local Board of Health in Toronto have had some difficulty in deciding on certain matters connected with the management of cases of contagious and infectious diseases. The Medical Health Officer has shown commendable zeal in his efforts to "stamp out" such diseases, although his methods have been rather theatrical at times, and his attitude towards the general profession has not always been conciliatory. There is a general concensus of opinion that isolation should be effected, and it was proposed by some that a special hospital should be erected for such purposes, and managed by the city officials. Others thought that as we have one excellent hospital board, with all the machinery at hand for executive and professional management, a separate board would be both needless and expensive.

Under the circumstances the Board of Health thought it wise to consult leading city physicians on the subject, and, with that object in view, invited a number to meet the members and give their opinions. A fairly good number accepted the invitation and were treated with marked courtesy. Drs. Barrick, Ross, Graham, Lynd, Sheard, Nesbitt, Temple, and others, expressed their views to the effect that a new isolation hospital could be far more efficiently and economically managed under the General Hospital Board than under the Local Board of Health. The correctness of these views was generally admitted, and it is probable that the advice given will be accepted in its entirety.

Among the many contributions on this subject to the public press was a communication from a Government officer, which contained comments on the details of management in the General Hospital of Toronto which were not very friendly in tone towards the trustees of that institution. The letter caused a certain amount of surprise to many, who thought it strange that an official in his responsible position should thus criticize a hospital which receives a public grant, and whose management is duly and regularly inspected by an officer appointed by the Provincial Government for such purposes. It may be that the inspector has been somewhat negligent in the performance of his duties, and, if so, it might be well if the letter-writing official were made a member of the Ontario Government. The new member in the cabinet would then be in a position to speak with some authority, and he could look after both the Government inspectors and the trustees of the Hospital.

THE HOMEWOOD RETREAT, GUELPH.

This Retreat is a private institution for the care and treatment of inebriates, victims of the opium habit, and mild forms of insanity. It was opened in December, 1882, under the medical superintendency of Dr. Stephen Lett.

The Retreat is charmingly situated and completely isolated from public observation. It has a capacity for forty patients, receiving females as well as males, and since the opening has admitted 316 patients, 191 of whom are classed as alcoholic or narcotic inebriates, and 125 as insane.

It is the pioneer institution in Ontario, and has demonstrated the fact that many such cases are curable when submitted to proper care and treatment, while it is only in an institution of this nature that suitable treatment can be obtained.

In the treatment of the opium neurosis, Dr. Lett is an ardent advocate of the method known as "gradual reduction," and censures those who advocate the heroic method of "abrupt withdrawal," which he characterizes as barbarous, inhuman, unscientific, and unnecessary, whilst the marked success which has attended the former method of treatment presents to the unhappy victims of this terrible disease the cheering prospect of emancipation from their terrible enslavement.

Regarding alcoholic inebriety, the medical superintendent consigns the vice theory to the tender mercies of the clergy, philanthropists, and other well meaning people, and places chronic alcoholism upon the scientific basis of a disease, or true neurosis. He asserts that it is amenable to treatment in the same sense as other diseases are, which which must be conducted on principles in harmony with the scientific knowledge of the present day. Many who have been so treated have led regular lives since their discharge. They have successfully followed their various vocations, and have again taken their places as useful members of society.

DEER PARK SANITORIUM, TORONTO.

We have before referred to the fact that a similar institution has been recently opened in Toronto as a private retreat for the subjects of inebriety or narcomania. The building for the purpose is well situated in Deer Park, North Toronto, and is surrounded with a beautiful piece of park ground. The plan is excellent. The rooms are bright, cheerful, and well furnished. The management of the sanitorium is well looked after by a competent board of directors composed of Messrs. Homer Dixon, D. W. Alexander, N. W. Hoyles, Q.C., H. O'Brien, R. Kilgour, S. Caldecott, W. A. Storm, E. R. C. Clarkson, T. J. Wilkie, Geo. E. Hague, Dr. C. S. Elliott, medical superintendent, Hon. Charles Drury, Major Carlaw, and Hon. S. H. Blake. These gentlemen, in organizing such an institution, were prompted more by a desire to assist a large and unfortunate class of sufferers, than any hope of great pecuniary profit. Such establishments have done much good in various parts of the world; and we hope, under modern methods of treatment, will do more in the future. It is needless to add that the two admirable institutions, to which we have referred, should have the cordial and hearty support of the profession.

Meeting of Medical Societies.

PATHOLOGICAL SOCIETY OF TORONTO.

Dec. 26th, 1891.

The society met in the Biological Department, the president, Dr J. E. Graham, in the chair.

The adjourned discussion on "Hepatic Sclerosis" was introduced by Dr. J. T. Fotheringham, and taken part in by Drs. John Caven and A. B. Macallum.

CONGENITAL INTESTINAL OSTRUCTION.

Dr. W. J. Greig presented a specimen and read the following paper on a case of

CONGENITAL MALFORMATION OF THE INTESTINES.

This case is interesting from the fact that the stomach and duodenum were healthy and normally developed. The rest of the small and the large intestines were abnormal, and had no connection with the duodenum. Numerous cases are recorded in which two healthy sections of bowel were joined together by a fibrous cord;

but I have been unable to find a recorded case in which the two sections were completely separate.

On the evening of Friday, May 8th, 1891, I was called to attend Mrs. W. in her first confinement. The child was large and well-formed, excepting an unusually large abdomen. A few minutes after birth it vomited green material.

May 10th. The child had been vomiting at intervals since its birth, and the only passage from the bowels was about a teaspoonful of meconium. It showed no disposition to nurse.

May 11th. Child in the same condition. Passed my little finger into the rectum, and found that it would enter about three and one-half inches. Passed a catheter attached to a fountain syringe. This entered about the same distance as my finger and then slipped into a contracted passage in which the eye of the catheter became blocked and the water ceased flowing.

Operation was then advised. The parents were told that the child was suffering from an obstruction of the bowels, and that its only chance of life, which was slight at the best, was from an operation.

May 12th. Performed Littre's operation in the left groin. On reaching the abdominal cavity a piece of fibrous gut presented itself. This was drawn out, examined, and returned. It was slightly larger than a lead pencil, and firm to the feel. A finger was then inserted and a healthy piece of inflated intestine was drawn into the incision. This was sewed to the abdominal opening and cut into in the usual way. Flatus and fæces escaped. The child was then wrapt in hot blankets and kept beside the stove. For a time it was thought that it would not recover from the shock of the operation, but in half an hour it was all right. It remained in a very fair condition all that day.

May 13th. Was called early in the morning. On reaching the house I found the child blue and cold and very feeble. It soon died, despite everything that could be done.

When we consider that the operation was performed on the morning of the fourth day after birth, and that during those three full days the infant had had little or no nourishment, it is not surprising that it died. I fear, also, that during the night preceding its death it had been allowed to become cold. The *post mortem* examination was made shortly after death. Signs of rather extensive peritonitis were present, not recent, but old, and therefore intra-uterine. Immediately beneath the abdominal wall, close to the umbilicus, there was adherent to the omentum a mass of organized lymph, dark in color. Extending downward from the stomach, there were about two feet of healthy bowel, ending in a *cul de sac*. Extending upwards from the rectum there were about three feet of the fibrous cord referred to above. It was the size of a lead pencil, firm to the touch, and on section was pervious. Two inches from the upper end it dilated, contained fæcal matter, and ended in a point. There was no connection between the two sections of bowel. The fibrous cord had no regular mesentery, but mesentery, omentum, and fibrous intestine were mixed up without any apparent regularity. I saw no evidence of vitelline duct, appendix, or ileo-cæcal valve.

The cause of this condition is the interesting question. Two hypotheses must be considered:

(1) Fœtal peritonitis.

(2) Failure of development.

(1) Fœtal peritonitis had been undoubtedly present. Ashby and Wright, in their recent work, mention several cases which have come under their observation in which two sections of healthy bowel were united by fibrous cord. This condition was associated with fœtal peritonitis. They therefore conclude that a relation of causation existed between the two conditions. Their conclusion is not a very logical one, because the obliterated section of bowel may have existed prior to the inflammation.

Assuming their conclusion as correct, does it throw any light on the present case?

Mr. Pitts, of London, has lately reported a case of volvulus in a new-born child. If this had taken place in early fœtal life, it would produce adhesive inflammation of mucous and serous surfaces, and thus obliteration of the intestine. Thus the condition of two healthy sections joined by a fibrous cord is produced. This cord may have been ruptured by violence, or separated by a sloughing process from the healthy bowel. Then we have the two sections completely separated. Thus we are able to

suggest an explanation of the separation of the sections, resulting from the presence of intra-uterine inflammation.

But it will be necessary to look beyond this to explain the fibrous condition of a large part of the bowels.

(2) Failure in development. The first formation of the alimentary canal is from the hypoblast. It consists primarily of a simple tube, extending to the anterior extremity of the embryo, and terminating there in a *cul de sac*, extending also to the posterior extremity, and ending there also in a *cul de sac*. These two terminations are common seats of obstruction. At the anterior extremity an involution of the epiblast occurs to meet the closed alimentary tube. Similarly involution occurs at the posterior extremity. A failure to absorb the separating membrane causes the obstruction. This tube of hypoblast represents what is to constitute the mucous membrane only. The muscular and serous coats are formed later from the mesoblast.

For descriptive purposes, the alimentary canal in the embryo is divided into three portions—the fore, middle, and hind gut. The fore gut consists of that section between the buccal cavity and the ilium, viz., the pharynx, œsophagus, stomach, and duodenum, and is a closed tube from the first. The hind gut corresponds to the middle portion of the rectum, and is also closed from the first. The middle gut corresponds to the ilium, jejunum, cæcum, colon, and first part of the rectum. This portion has primarily the form of an open groove, and communicates freely with the cavity of the umbilical vesicle. The groove gradually narrows, and finally a tube is formed which connects with the umbilical vesicle through the ductus vitello-intestinalis.

At first the large is less in calibre than the small intestines. But soon the cæcum begins to form and grows out from the rest.

This growing out of the large intestines occurs about the twelfth week. The ileo-cæcal valve appears at the beginning of the third month.

In the case under consideration the middle gut was a closed tube. But there was no sign of the distinction between large and small intestine; no appearance of the cæcum or of the ileo-cæcal valve, or vermiform appendix, or vitellineduct.

Considering the condition of the facts, therefore, the abnormality would appear to have resulted from an interference with the development of the mid-gut some time during the second month.

In looking for a cause, we realize that very little is known about the causes of failure in development.

Maternal impressions have often been assumed to produce monstrosities and abnormal fœtuses. Many peculiar facts have been brought forward in support of this view. But there is no knowledge of a scientific character. The reasoning is entirely *post hoc propter hoc.* To explain the failure to develop in this case we must look to either the nervous or arterial systems. There is a reason for this in the present case. Conception had taken place before marriage. Medicine had been obtained from some source and given for the purpose of producing an abortion. We know nothing of the nature of the medicine. Is it possible that it had caused interference with the blood supply to the mid gut through the superior and inferior mesenteric?

Dr. J. Olmstead presented the following specimens:

(1) FŒTAL MONSTER.

The fœtus was delivered from a woman 35 years old, ten months after marriage. Husband was much addicted to the use of alcohol and was younger than wife.

The monster was anencephalous, with ectopia of the abdominal viscera, exophthalmos, and double talipes equino-varus. Projecting from the centre of the anterior surface of the body is the heart, liver, stomach, spleen, intestines, and right lung. The head is bent back at an angle. There appears to be almost no brain, although fluctuation can be made through the eyes with the part joining on to the spinal column.

He intended making a dissection, and would report further on the case at a future meeting.

(2) ADHERENT PERICARDITIS.

E.R., æt. 60, a porter, colored. Admitted into City Hospital 2nd Oct., 1891, complaining of shortness of breath and weakness.

Family History: Mother died æt. 55, of dropsy. Cause of father's death not known. Two sisters, alive and healthy.

Previous History: Had infantile diseases Had acute rheumatism when 35 years of age, and since that time has suffered occasionally from slight attacks. No other trouble till the present one.

Present History: In fall of 1890 patient began to notice puffing about the ankles, which was always worse in the morning, going away during the day. Complained of pain in the head over the eyes, and occasional attacks of vertigo. Eyelids puffed in morning. This condition became gradually worse, but did not prevent him from working until a short time before admission.

Present Condition: Tongue broad, moist, with thick, yellowish brown coat. Appetite poor; cannot take solid food, as it causes pain in the stomach, with occasional vomiting. Sometimes a little blood vomited. Liver dulness normal. Bowels constipated. Abdomen somewhat enlarged, with dulness at sides, the line of which changes on changing position of patient. Fluctuation over dull parts. Œdema of legs, arms, and hands. Eyelids puffed.

Respiratory System: Inspiration and expiration about equal. Dullness over both bases. Respiration, 28; temperature normal. Expiratory sound as high pitched as inspiration. Breathing labored. Mucous rales at both bases.

Circulatory System: Apex beat ½ inch below nipple in mammary line. Heart beats forcibly and irregularly. Superficial area of cardiac dulness increased. There is an intensity of the heart sounds in the direction of the axilla, but no murmur can be heard, although the valvular sounds are not so clear and cut off as normally. Radial artery somewhat thickened.

Urinary System: Complains of pain in back over region of kidneys, which varies in intensity. Sometimes has complete control of bladder. Does not pass much urine at a time, but urinates five or six times during the day and about three times during night. Prostate slightly enlarged; 38 ozs. urine excreted in 24 hours.

Urine contains ½ of 1 per cent. of albumen, and fatty and granular and some hyaline casts. About 22 grammes of urea excreted.

Sight pretty good. Arcus senilis well marked. Incipient cataract in left eye. No changes noted in the right eye.

Oct. 4-5. Not much change, although he breathes easier; would have to have head and shoulders elevated all the time.

He gradually became worse; less urine excreted, and on the 9th he became comatose, and no urine was passed after this. Only about 8 grammes of urea was excreted in the 24 hours, when he began to develop the coma. Died on 11th, nine days after admission.

Post mortem 24 hours after death. Considerable œdema of arms and legs, ascites; *rigor mortis* well marked. Hypostasis on posterior parts of body.

Abdomen: Organs in normal position; about two quarts of ascitic fluid; diaphragm extends to 6th rib. Some old adhesions on the liver and over lower part of peritoneum.

Thorax: Found costal cartilages ossified; pleuritic adhesions general over both lungs. Lungs œdematous; hypostatic pneumonia; no nodules.

Heart: Pericardium found adherent over the whole surface of heart; aorta atheromatous; right ventricle dilated; tricuspid opening admits four fingers; right auricle dilated and filled with blood; aortic valves normal; left ventricular cavity 3½ inches from aortic valves to apex of cavity; wall 1 inch thick.

Abdomen: Spleen friable and of firmer consistence than normal. Left kidney, hard nodular; weight 6½ ounces; capsule adherent; cortical structure somewhat diminished, and shows, apparently, general nephritis. Right kidney contracted; cortical portion very much diminished; weight, 5¼ ounces; capsule adherent.

Stomach: Congested, and two small old ulcers on surface. Liver shows Liebermeister's furrows with fatty and pigmented. Several gall-stones in gall bladder.

Other organs apparently normal.

GOITRE IN A TERRIER DOG.

Dr. A. Primrose presented an injected specimen, and read the following paper:

This small dog weighs 6½ lbs.; his age could not be ascertained, but he is apparently not very old. For a little more than twelve months a swelling had been observed in his neck; this increased in size slowly but did not seem to give him any trouble until three months before his death, when he developed a trouble-

some cough. He began to lose flesh, and latterly suffered from difficulty in swallowing. Dr. Ross examined the dog and found a large tumor in the neck, which pulsated strongly, and, on applying the stethoscope, yielded a very marked bruit; it was thought that it might possibly be aneurismal in character. A few days after this examination the dog took a fit of coughing, and apparently choked to death.

On examining the dog *post mortem*, an incision was made down the middle line of the neck; on finding an enlarged thyroid gland the sterno-thyroid and sterno-hyoid muscles were divided and the tumor laid bare. The abdomen was opened and a red arterial injection thrown into the aorta. Whilst driving the injection on slowly, under pressure, the tumor was watched, and an excellent demonstration of the extreme vascularity of the goitre was obtained. The tumor increased considerably in size as the dilated blood vessels were filled. The measurements of the tumor were: Length, 2¼ inches; breadth, 3¼ inches; thickness, 1¾ inches. The two lateral lobes of the thyroid were equally enlarged and lay in contact with one another, separated only by a double fold of fascia which dipped down between them immediately in front of the trachea. The two lobes were united posteriorly by a narrow isthmus ½ inch in thickness; there was no vestige of a middle lobe. Each lateral lobe was egg-shaped, the large end being posterior. The superior thyroid arteries are very large, and each passes to the gland at the anterior extremity of the lateral lobe, and, even on superficial view, large branches of artery are seen ramifying in the gland. The inferior thyroid arteries enter posteriorly, near the middle line, and the anastomosis, with branches of the superior thyroid artery, is free. Evidence of pressure on the trachea is noticeable in a considerable degree of flattening.

Goitre is a rare disease in dogs. Sir Morrell Mackenzie presented a specimen to the Pathological Society of London* and remarked upon the rarity of the disease in dogs in England. He states that even in Derbyshire, where bronchocele is endemic, it is uncommon. He speaks, however, of having met with many cases in Switzerland. There is one specimen of the kind in the museum of the Royal College of Surgeons, of England.

For the sake of comparison, a dog with a normal thyroid was injected at the same time with similar injection material. The comparative size of the thyroid arteries (injected as near as possible under the same amount of pressure) is noteworthy. The normal arteries are much smaller, although this animal was very much larger than the one with the goitre. In this dog, too, the thyroid is represented by two lateral lobes, unconnected by an isthmus; this is the usual condition in dogs.

Goitre seems to be almost invariably fatal in dogs. Only a very small number are said to survive.* In this connection it is worthy of note that Horsley found that after excision of the thyroid in dogs the animals never lived until that stage was reached in which mucin is deposited in the tissues. On the other hand, monkeys survived this stage. Therefore, in dogs fatal consequences seem to follow whenever the thyroid gland is extirpated or its function is in abeyance.

In answer to a question by Dr. McKenzie, Dr. Primrose said that the cough and dyspnœa were due to the direct pressure of the two lobes from in front upon the trachea, and the denseness of the fascia, both circumstances not usually existing in the human subject.

INTERSTITIAL NEPHRITIS.

The following case was presented by Dr. J. E. Graham:

C.E., male, æt. 62; born in England. Family history unimportant.

Previous History: Habits regular; takes an occasional glass of beer, but does not drink to excess. Has had measles in childhood; otherwise healthy until a few years ago, when he had varicose veins and two ulcers appeared on right leg and foot, but only slight cicatrices are at present apparent. Always used to light work, *e.g.*, canvassing, etc.

Present Attack: Patient dates commencement of present condition back to some six years ago, since which he has had several attacks similar to the first, and also to the present one. First attack came on six years ago as severe pains shooting through the lower lumbar

*Path. Soc'y Trans., Vol. xxv., p. 278-79.

*Landais & Stirling, Text-book of Physiology, 2nd ed., vol. i., p. 224.

region, continued with exacerbations and remissions for two or three days, when they suddenly ceased. Patient could not bear to be moved or to straighten himself during this attack, and could not give any cause for symptoms coming on. Since then he has had several attacks similar to the first, but pain not so acute or severe. Patient noticed the urine somewhat dark in color, and had a somewhat reddish-brown sediment. Urine about normal in amount, or slightly increased. Feet and legs used to swell slightly. Present attack came on about six or eight weeks ago with severe pain in the lumbar region, increased on deep pressure; more marked on right side; shoots down the thigh.

Present Condition: Pains in lumbar region, shooting down the thigh; increased on deep pressure; much increased on sudden movement, but not on slow bending of the back. Micturition more frequent and more urine passed, but no pain of any account on micturition or on pressure over the bladder. Complains of slight dizziness; appetite fair; tongue not coated. Puffiness below the eyes, but no marked œdema of feet and legs.

Circulatory System: Pulse, 80; full and tense. Arteries have a cord-like feel and are tortuous. Apex beat displaced considerably to the left and slightly downwards. Second sound in both pulmonary and aortic areas increased in intensity. Peculiar murmur heard at lower end of sternum. Systolic mitral murmur heard at apex and traced round to right angle of scapulæ.

Respiratory System: Normal.

Alimentary System: Appetite fair; bowels slightly relaxed.

Urine: Deep amber color. Flocculent precipitate; sp. gr. 1020. Albumen present in small quantity; no bile. Microscopically, abundance of uric acid crystals. Red and white blood cells; a few casts (looked like hyaline).

Temperature: Slightly elevated.

Treatment: Mistura tonica. Pil. nitro-glycerine, $\frac{1}{100}$ grs. three times a day.

On Dec. 2nd, just after retiring, between 9 and 10, patient began to feel uneasy with feeling of impending death; tried to fight it off, as he says, but it increased, and patient got out of bed to walk around, when feeling increased to such an extent that he appealed to the nurse, who got him back to bed and called a house surgeon. Patient said he had memory of his former days, etc. Feeling of compression of chest, as if held in a vise, and extreme difficulty of inspiration. Patient had not noticed any suppression of urine, and could give no cause of attack. House surgeon gave him a draught, which did not relieve him, and soon after gave him an emetic, which relieved him somewhat, but attack did not pass off until about 4 o'clock in the morning, at which time patient fell asleep, and when he awoke feeling had entirely gone. Had feeling of another similar attack on the next night, but it passed off.

Dec. 7th. Patient was restless and even semi-delirious through the day, getting up and going to bed alternately, and getting worse later in the day. In the night patient was very delirious, tearing round the ward and halls, and ward-tender could not keep him quiet and in bed. Pulse full and strong until about an hour before his death, at which time it began to weaken and flutter. About half an hour before death patient quieted down, and, as nurse says, slept away. Died about 5 o'clock a.m., on Dec. 8th.

Autopsy showed: Right pleura normal; left pleura strong, apparently old adhesions over greater part of surface. Heart: Weight, much increased (not weighed); blood, *post* and *ante mortem* clots; muscle looks healthy; valves, competent; right side not very thick; left side, thickness greatly increased; for. ovale closed. Lungs: Left lung, œdematous, weight small; right lung œdematous; black nodules in apex, probably tubercular. Spleen: Weight very small; dark, but firm. Kidneys: Left kidney, weight 5½ ozs.; capsule peels readily; cortex thickened; shows numerous depressions, evidence of local interstitial nephritis; large cyst in upper end; more recent parenchymatous nephritis. Right kidney: Weight, 3½ ozs.; capsule peels readily; cortex much diminished fibrous to cut, very small; calculi found on section. Bladder: Normal. Testes retracted strongly. Small intestines and mesentery, normal. Stomach and œsophagus, normal. Liver and gall bladder: Small calcareous nodule in liver. Aorta shows some signs of atheroma. Smaller arteries much thickened, but not calcified. Brain and membrane: Nothing abnor-

mal noticed except numerous small hemorrhages in pons.

Dr. Graham remarked further that it was plainly a case of interstitial nephritis of the right kidney, primarily due to calculus, probably uric acid. The heart condition was secondary to the change in the kidney. The same change was seen in an earlier stage in the left kidney. The clinical history showed recurrent attacks of renal colic. This case was one in which the disease of the kidney seemed primary and the cardio-vascular changes secondary; not the order usually given. The heart murmurs were noteworthy; that soft blowing murmur, constantly present but varying in intensity, was audible only at the back, on the level of the apex beat, not in front. One usual cause given for cardiac murmurs in Bright's disease is excessive dilatation of the ventricle and movements of irregular currents of blood. In this case the sound was probably due to mitral regurgitation. What was the cause of death? There was no stupor as is usual in uræmia; it was not due to heart weakness, as there was no abnormal amount of clot found in the heart.

Dr. John Caven had made the microscopical examination of the organs in this case, and reported that the radial artery showed well-marked endarteritis, and in the kidneys there were similar obliterative changes present in both. The pons varolii showed, perhaps, half a dozen small but well-marked hemorrhages.

Dr. McPhedran regarded the case as showing angina pectoris with no pain, a condition that would be very promptly relieved by amyl nitrite. Death seemed not to be due to uræmia.

Dr. Oldright detailed a case of death from heart failure in his practice which he thought was due to a toxæmia of renal origin, though not uræmic, in the ordinary sense of that term at any rate.

URINE IN PERNICIOUS ANÆMIA.

Dr. McPhedran presented a specimen of urine from a case of pernicious anæmia. It was very acid and highly colored; sp. gr. 1022. The blood in this case showed no megalocytes, but many microcytes; red corpuscles did not run into rouleaux, but into clumps. There was fair number of poikilocytes.

CARD SPECIMENS.

The following were presented by Dr. J. Caven:

(1) Tubercle in udder of cow.
(2) Leprosy.
(3) Carcinoma of peritoneum.

The Society then adjourned.

Personal.

DR. PAUL F. MUNDÉ, of New York, was recently elected a corresponding Fellow of the Obstetrical Society of Leipsic.

DR. ED. GORDON, formerly of Toronto, now surgeon on one of the C.P.R. steamers, received a fracture of the leg while playing football in Vancouver last month.

Obituary.

DR. JAMES YOUNG ALLEN, of Toronto, died Feb. 1st, at his home on Carlton street, from *la grippe*. He was a man of ability and had a superior education, having been trained in Glasgow and Paris where he graduated fifty-seven years ago. As he lived in comparative retirement he was not well-known to the profession; but those who knew him intimately entertained a high respect for him.

SIR MORELL MCKENZIE, M.D., died at London, February 3rd, from syncope, following an attack of influenza, at the age of 55. He was well known as a specialist in diseases of the throat. He was the chief in attendance on the late German Emperor Frederick during his last illness, and received his knighthood as a recognition of his services at that time.

MR. JOHN WOOD, F.R.S., at one time Teacher of Anatomy, and for many years Professor of Surgery in King's College, London, died Dec. 29th.

MR. BERKELEY HILL, another of London's well-known surgeons, and vice-president of the Royal College of Surgeons, died last month.

DR. J. M. SMITH, an old practitioner, of London, Ont., died February 9th.

Miscellaneous.

THE following communication has been received from the Rush Medical College, Chicago: A concourse will be held at Rush Medical College, beginning Tuesday evening, March 1st, for the purpose of filling the positions of lecturer on anatomy, and on materia medica, and therapeutics, in the spring faculty. The spring course begins March 31st, directly after the close of the regular term, and continues two months, with a class of from two hundred and fifty to three hundred students, thus affording the lecturers an excellent opportunity to exercise their skill as teachers. It is the policy of the college, so far as practicable, to fill vacancies in the regular faculty from the corps of spring instructors. Nine of the present members of the regular faculty have been selected in this way. The concourse will consist of twenty-minute lectures by each of the applicants, before the faculty, students, and local profession, upon subjects pertaining to their branches, which will be furnished by the professors of anatomy, and materia medica, and therapeutics, a week before the contest. E. FLETCHER INGALS, *Registrar.*

NEW YORK POST-GRADUATE HOSPITAL.—The Directors of the Post-Graduate Hospital and Babies' Wards, in presenting their annual report, inform their friends and the public that more patients have been under their care than in any year since the establishment of these Institutions. 842 house patients have been treated; of these 286 were babies and 556 adults. 13,007 patients have been treated in the Dispensary, where 43,791 visits have been made. Babies, children, women, and men, here receive skilled medical and surgical care, and a large class of practitioners of medicine, by watching the details of this treatment, are made much more competent for their work.

QUININE AND ANTIKAMNIA.—Dr. Gayle, of Kansas City, thus speaks about the treatment of influenza: "Quinine is the best germ destroyer we have for the microbe of influenza. During the recent epidemic I aborted quite a number of cases with Antikamnia in combination with salol and quinine. The relief obtained by the administration of Antikamnia where the cephalalgia was severe, as in the majority of my cases, was wonderful. When the pain seemed intolerable, I have seen Antikamnia banish it. The combination spoken of was as follows:

℞	Antikamnia.....	℥ i
	Salol.....	℥ ss
	Quinia sulph.....	℥ i

M. Ft. Capsules No. XXX.
Sig.:—One every two hours.

Mustard pediluvia are of great advantage, and a plaster of mustard and lard, one part of the former to two of the latter, applied directly to the chest, answered admirably as a mild counter-irritant.

DURING the last six years (1885 to 1890 inclusive) twenty-three deaths under chloroform occurred within the colony of New South Wales, viz., six each in the Sydney and Prince Alfred Hospitals, two each in the Albury and Goulburn Hospitals, and one each in the Gulgong, Wagga, Tamworth, St. Vincent's, and Newcastle Hospitals, the Gladesville Hospital for the Insane, and Dr. Wood's Private Hospital at Stanmore.—*Australasian Medical Gazette.*

A MODEL HOSPITAL—THE NEW GENERAL HOSPITAL, HAMBURG.—This model hospital is situated at Eppendorf, four and a half miles from the town, from which it is reached by tram-lines (street railway) running into the hospital grounds. It occupies forty-five acres of undulating ground of sandy soil, and comprises eighty-three separate buildings, for the most part of one story high. The wards are constructed on the pavilion principle. The floors are marble, imbedded in cement. The total cost was $2,170,000, or $1,170 per bed. The cost of maintaining it in 1889 was $265,000. There are twenty-six medical advisors, ninety female nurses, and one hundred and four male attendants.—G.F.S.—*Weekly Medical Review.*

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INFECTIVE INFLAMMATION OF THE VESICULÆ SEMINALES.*

BY A. PRIMROSE, M.B., C.M. EDIN.; M.R.C.S. ENG.,

Lecturer on Topographical Anatomy in the University of Toronto, Surgeon to the Hospital for Sick Children, and to the out-door department of the Toronto General Hospital.

Tubercular disease of the vesiculæ seminales is by no means infrequent; the condition is usually secondary in its development in the vesiculæ, the primary source of infection being the testicle or epididymis. This is such a well-recognized fact that in dealing with a tubercular orchitis or epididymitis, we examine the cord for thickening, and we endeavor, by rectal examination, to determine the condition of the vesiculæ seminales; our method of procedure in treatment being considerably modified if the vesiculæ be implicated in the disease.

The prostate may become involved in a tubercular process also, or the disease may be primary in the prostate, and infect the vesiculæ seminales secondarily. Is it not possible for an inflammatory process to travel in the opposite direction, affecting primarily, say the urethral tube, and involving secondarily the vesiculæ seminales? Undoubtedly the process is often reversed in this manner; thus we frequently meet with secondary involvement of the prostate and of the epididymis, the primary source of infection being the urethra, and among the common complications of gonorrhœal urethritis are described prostatitis and epididymitis. We would be surprised if in such processes the vesiculæ seminales should be exempt from implications, and yet we are forced to one of two conclusions: either inflammation does *not* occur secondarily in the vesiculæ, or it is not recognized when it does occur. We look in vain in the standard writings on gonorrhœal complications to find any statement which warns us of the possible implication of these structures in a patient suffering from gonorrhœal urethritis.

There are close anatomical and physiological relations between the urethra, prostate, vesiculæ seminales, vas deferens, epididymis, and testicle, which may advantageously be studied in discussing the subject of this paper. The vesiculæ seminales form two sacculated bodies, each measuring about two inches long and half an inch broad, situated on the posterior aspect of the bladder, between it and the rectum. The posterior extremities of the vesiculæ are separated about three inches, the anterior extremities converge towards the base of the prostate, where their ducts join the vasa deferentia, which pass to the prostate between them. As they lie between the rectum and the bladder they are enveloped in a layer of pelvic fascia, which attaches them to the base of the bladder. The recto-vesical fold of peritoneum descends over their posterior extremities, but the greater portion of these organs is devoid of peritoneal covering. The sacculated appearance of the vesiculæ is accounted for by the fact that each is formed of

*Read before the Toronto Medical Society.

a tube coiled and repeatedly doubled on itself. When this is unravelled it is found to be from four to six inches long, and from this tube there are, as a rule, several short diverticula. The duct of each seminal vesicle, about half an inch long, joins the vas deferens of its own side, just at the base of the prostate, to form the common ejaculatory duct. This common seminal duct tunnels the substance of the prostate gland and opens into the neck of the utricle, a pouch-like dilatation from the floor of the anterior portion of the prostatic urethra. Thus we have the continuity of the mucous lining of the vesicula seminalis established, on the one hand, with the urethra, through the common ejaculatory duct, and through the same channel with the vas deferens, which leads back to the epididymis. The epididymis which surmounts the testicle presents characteristics in its anatomical structure very similar to that found in the vesicula. It, too, is formed of a long convoluted tube, in which terminate the efferent ducts of the testicle; in direct continuation of the convoluted tube of the epididymis being the vas deferens, the excretory duct of the testicle, which is nearly two feet in length.

We have thus a long continuous stretch of mucous membrane lining the urethra, and the ducts which I have described in relation to the male generative organs. The arteries of the vesiculæ are derived from the inferior vesical branches of the internal iliac; the veins pass into the prostatico-vesical plexus; the lymphatics are very numerous, and end in the middle hypogastric glands. The nerves belong to the sympathetic system and come from the hypogastric plexus.

Functionally, we have to consider the system of tubes as composed of two factors. First, that portion of it which belongs solely to the genital apparatus, and, secondly, that portion of it which is common to the urinary and genital systems. The urethra is frequently being flushed out by the passage of urine; on the other hand, the tubular system which belongs purely to the genital apparatus is not subjected to the same flushing process. The urethra may be the seat of an acute inflammation, and yet the passage of urine goes on, unless, indeed, there be retention; on the other hand, the genital ducts when acutely inflamed are not subjected to the same process.

In gonorrhœal epididymitis, it is probable that the inflammation travels from the urethra along the ejaculatory ducts and vas deferens. When we consider the path it takes, the long course from the prostatic urethra to the epididymis, we must necessarily expect that other structures nearer at hand and in more intimate relation to the prostatic urethra would take part in the inflammatory process. We would therefore expect to find the prostate or the vesiculæ seminales frequently implicated, and, in fact, more frequently the seat of secondary infection than the epididymis. As a matter of fact, the frequent occurrence of prostatitis is said to be perhaps the commonest complication of gonorrhœa; the ducts of the prostate gland open into the prostatic sinus in the floor of the prostatic urethra, and no doubt along these ducts the inflammation may travel. It would, indeed, be curious if the ducts proper to the prostate should be selected by the inflammatory process and the ejaculatory ducts escape.

It is worthy of note that the symptoms of acute inflammation of the prostate would present characteristics very similar to those presented by inflammation of the vesiculæ seminales; this is accounted for by the intimate anatomical relationship existing between the structures. Their position and their relation to the neck and base of the bladder are almost identical; the effect produced and the referred pain caused by the contracting bladder would be the same in the case of inflammation of either structure. To a certain extent this is accounted for by the common source of the vascular supply and the similarity of the nerve and lymphatic connections of these structures. It would therefore be difficult to diagnose between the two conditions, and it is probably on this account that inflammation of the vesiculæ seminales is seldom, if ever, recognized. Further, we may look for conditions in which both prostate and the vesiculæ seminales are affected at the same time; this is possible, and probably occurs. Under such circumstances the physical signs would be those present in ordinary prostatitis.

Inflammation of these structures at the neck of the bladder is often very persistent, the pain is intense, and is greatly exaggerated after the

act of micturition. When this condition is unduly persistent, and all ordinary remedies fail to give relief, the patient continuing to suffer for weeks, or even months, we may suspect that the trouble is located in the vesiculæ seminales and not in the prostate. We must not come to this conclusion on these grounds alone, but an examination per rectum may aid us, and we may be able to detect the position of an inflamed vesicula seminalis, which we will find indurated and very tender, occupying a position extending beyond the base of the prostate. The inflammatory process in the vesiculæ seminales follows a similar course to that occurring in the epididymis, an organ of a like anatomical structure, namely, a convoluted tube. We are familiar with the character of the inflammatory process in the epididymis. At first, very acute with intense pain, and probably high fever; after the acute stage has passed off, a subacute stage supervenes, in which there is still a considerable amount of tenderness and the organ remains indurated; the induration and pain may persist for some months; suppuration may occur, and is by no means infrequent. We find the statement made that inflammation of the prostate may lead to suppuration and the formation of an abscess. It is quite possible, however, that many of the abscesses which are supposed to originate in the prostate are really in the vesiculæ seminales.

Mr. Jordan Lloyd recently read a paper on what he termed "Spermato-cystitis,"* dealing with the subject of inflammation of the vesiculæ seminales. In that paper Mr. Lloyd makes the following statement: "So little attention has been paid to inflammatory diseases of the seminale vesicles, that the subject is dismissed in a few words, even in special monographs upon venereal or genito-urinary disorders; but since my attention was first directed to the subject I have met many cases, and have satisfied myself that these maladies are by no means rare. They are, indeed, amongst the most common complications of gonorrhœa. They are usually overlooked, not because they do not give rise to definite signs and symptoms, but because these symptoms are misinterpreted and are wrongly attributed to diseases of different organs altogether." The history of the following case, recently under observation, suggested the implication of the seminale vesicles in a gonorrhœal inflammation. H.D., æt. 24, contracted a gonorrhœa; the pain and urgency from which he had suffered in the early stages of the attack had subsided, and the discharge had almost ceased, when at the beginning of the third week he was seized with severe pains, deeply seated in the perineum. Hot fomentations were applied and antipyrin administered. Despite this treatment the pain increased so greatly in a few hours that it was necessary to administer morphia hypodermically for his relief. A mixture containing chloral and bromide was prescribed, and during the next few days the pain diminished somewhat, but then recurred with increased severity, so that morphia was again necessary. During this time he had increased frequency of micturition and urgency. In order to check the irritability of the bladder, bicarbonate of potash and tincture of hyoscyamus were administered, and the bowels were kept regular by giving sulphate of magnesia. Three weeks after the onset of these symptoms, the pain at that time being much less acute, an examination was made per rectum. This revealed the presence of a swelling on the posterior aspect of the bladder. It was more marked to the right of the middle line than on the left, and its posterior margin was not determined. The examination caused him much pain, and there was excessive tenderness on pressure over the swelling. It was thought probable that the inflammation was situated in the seminale vesicles, more marked on the right side than on the left. During this time the urine was examined frequently. It was noticeable that the urine first voided was clear and of normal appearance. At the end of the act of micturition, discharge of mucopurulent material took place, accompanied by blood; the amount of blood lost from time to time varied but was usually small. The urine was of spec. grav. 1006 and alkaline reaction, albumen 1/8th contained pus cells; there were no casts and no epithelial cells. During the second and third weeks of the attack (fourth and fifth weeks of the gonorrhœa) the most distressing symptom was the urgency of micturition. The pain was no longer constant, but he suffered acutely after voiding urine, the pain lasting a variable

Lancet, October 31, 1891, p. 974.

time, from ten minutes to half an hour. The usual remedies were tried: alkalies with uva ursi and triticum repens were administered, giving these in large doses without any appreciable effect. A suppository, containing extract of belladonna gr. i, was then ordered every sixth hour; this at once began to take effect, the frequency became less, the pain diminished, and the hemorrhage soon stopped. During his illness he had been kept resting in bed, living on a milk diet, and had been taking freely of diluent drinks, chiefly barley water. His general health had suffered much, and a tonic was now prescribed, containing iron and strychnine; all other treatment was stopped, save the belladonna suppositories, which were still necessary. Improvement was very slow, and three months after the onset of the attack the following condition was noted: he had gained strength considerably, and was able to walk about without pain; there was still a certain degree of frequency, rarely did he go more than two hours without passing water; then, again, he usually had an attack of pretty severe pain once in twenty-four hours, the pain lasting an hour or more; he still found it necessary to take a belladonna suppository occasionally; if he neglected to do this, the frequency increased and the pain became aggravated. It was found later that the pain could be held in check by anticipating its occurrence and administering gr. 15 of quinine before its onset. Having sufficiently recovered from the attack at this stage, he was advised to go to the seaside for a few months, hoping that he would benefit by the change of climate.

The history recorded above is that of a case of very common occurrence. The signs and symptoms are usually, and we are forced to believe wrongfully, attributed to an inflamed prostate. Suppose we grant that the prostate may be inflamed in a gonorrhœal urethritis, would it not be remarkable if the vesicles should invariably escape?

The difficulty in diagnosis is conceded. If there be difficulty in distinguishing an epididymitis from an orchitis, there will be still greater difficulty in determining between an induration of the seminale vesicles and a like affection of the prostate. In the case of the inflammatory tumor in the scrotum, it is sometimes well-nigh impossible, by palpation, to make certain whether we are dealing with an inflamed testicle or an inflamed epididymis; of course this remark applies only to certain stages in the process. When, on the other hand, the tumor is situated at the neck of the bladder, it must be still more difficult to differentiate between the two possible conditions in that locality, the vesiculæ seminales and the prostate lying in such intimate relation with one another, and, when either organ is the seat of an inflammatory swelling, the post-vesical tumor would occupy very much the same locality; then, again, we cannot reach these organs by direct palpation; we can only examine them through the anterior rectal wall. The symptoms and signs of inflammation of the vesicles are similar to those usually ascribed to the acutely inflamed prostate; the condition usually develops in the third or fourth week of the gonorrhœal attack; pain deep in the pelvis and perineum, and towards the end of the penis; frequency of micturition and urgency, with a severe exacerbation of the pain on completion of the act of micturition; the urine first passed is of normal appearance, but towards the end of the act of micturition there is a muco-purulent discharge, with blood occasionally. An examination per rectum yields, however, the most characteristic sign, and here, again, I quote from Mr. Lloyd, who has studied a large number of cases. He says "the swelling will be found to occupy the whole of the base of the bladder from side to side, and to extend beyond the reach of the finger." He states, as his opinion, that he cannot conceive it possible that the prostate, shut up as it is in its own fibrous capsule, can swell up to this size in the course of a few hours. He asserts his belief that inflammation of the prostate is a disease of comparative rarity; on the other hand, he considers inflammation of the vesiculæ seminales of common occurrence.

It is the peri-vesicular connective tissue which is the chief seat of the inflammatory process, resembling in this particular a similar condition in the epididymis. The usual termination is that of resolution, but suppuration may supervene. The abscess formed may open in the perineum, or into the rectum, bladder, or urethra, and it is stated that Douglas' pouch may be opened up and the pus discharged into the peritoneal cavity.

The tendency of infective inflammation to spread along mucous canals is constantly observed; it may travel from the urethra to the bladder, ureters, and the kidneys, as well as along the genital ducts; then, in the female, the dependence of many cases of salpingitis on gonorrhœal infection is well established.

The treatment of the condition may be considered from two points of view: (1) Preventive; (2) palliative and curative. The administration of diluent drinks and diuretics during the acute stage of gonorrhœa does much to prevent passage of the inflammation backwards along the urethral canal. A flushing-out process is thus carried on, and the poison is by this means, to a certain extent, got rid of. On the other hand, urethral injections during the early stage of a gonorrhœa are to be condemned; they may, it is true, do good, but a great danger exists of carrying the virus backward, setting up infective inflammation near the neck of the bladder. When inflammation of the vesiculæ seminales has been established, then our flushing-out process will have little effect upon it; nevertheless we must not even then employ urethral injections, for fear of carrying the inflammation still further back in the prostatic urethra to the bladder, with the danger of setting up a gonorrhœal cystitis. The passage of instruments must be avoided if possible, as the same danger is encountered there. We can do much to allay suffering by ordering a hot hip bath. Occasionally the injection of cold water into the rectum is grateful to the patient. The better way of relieving pain and diminishing frequency, however, is by administering belladonna in the form of suppositories. The bowels must be kept active by saline cathartics. The patient should be kept on a milk diet and stimulants prohibited. These are the chief indications in treatment. When the acute stage has subsided, tonics of iron, strychnine, or quinine are serviceable. Quinine seems to be of use also in diminishing frequency, although its specific action here is not generally recognized. If an abscess forms it must be opened early because of the danger, if tension be not relieved, of the pus burrowing in dangerous localities.

The object in writing this paper has been simply to call attention to the fact that these organs may be the seat of a serious infective inflammation, and, if possible, to excite some interest in the subject in order that keener investigation may be made when dealing with inflammation in this neighborhood.

CLINICAL REMARKS ON CASES OF ANÆMIA,

In Toronto General Hospital, under the care of

ALEX. M'PHEDRAN, M.B.,

Associate Professor of Clinical Medicine, University of Toronto.

Case 1.—Chlorosis. Maud M., seamstress, æt. 23. Was well until two years ago, when she took cold and was ill for two months, during which her feet swelled somewhat. She recovered, but never regained her usual health. Last winter she took cold again, with severe cough, but without expectoration. The swelling, especially of the legs, increased considerably. There was also considerable palpitation, with pallor, which now began to assume a yellowish tinge. She had recurrent attacks of illness without the history of any special ailment. She entered the hospital last October, being still able to go about, and having a fair appetite. She is now (January, 1892) unable to leave her bed. You see she is very pale, with a marked greenish-yellow tinge; conjunctiva pearly; lips pallid; tongue pale, flabby, and teeth indented. There is abundant subcutaneous fat, and she would look fat even were there not so much œdema, which has only lately, she says, become marked. Now there is considerable ascites and some hydrothorax. There has lately been a very troublesome diarrhœa, with offensive stools. Menstruation was regular until two years ago, when it became irregular and scanty. For some months back menses have been absent. The lungs are healthy. The heart shows a well-marked mitral regurgitation, and to this, with the great degree of anæmia, is due the dropsy. The blood contains only 1,000,000 corpuscles per centimetre; they have little tendency to form rouleaux, are regular in shape and normal in size, but very pale, so that the number of corpuscles is in excess even of the amount of hæmoglobin. The urine is rather pale; sp. gr. normal. The liver and spleen are large, doubtless on account of the defective circulation due to the disease of the mitral valve.

This woman presents all the typical characters of chlorosis: Absence of emaciation, the green-

ish-yellow pallor, the amenorrhœa and hæmic murmur over the base of the heart and root of the neck. Usually in these cases there is constipation, to which the anæmia has been attributed by some. There has been constipation here, and the diarrhœa at present is probably due to decomposition of the intestinal contents, resulting in irritation and increased peristalsis. Bismuth and beta-naphthol to disinfect the bowel, with small doses of opium to allay irritability, will probably control it. If constipation persisted, laxatives persistently used, to maintain free evacuation, would be necessary. In many cases laxatives, with plenty of food rich in iron, as meat and eggs, are sufficient to effect a cure. The explanation of this is probably to be found in the fact that the saline, by keeping the bowel free from fæcal matter, not only prevents damage to the blood by poisons that may be absorbed from too long retained fæces, but may succeed also in keeping the bowel clear of poisons that combine with, and thus render useless, the iron compounds of the food. Iron in all forms, given as medicine in anæmia, is of use, partly at least, in combining with those poisons, mostly sulphides, in the intestinal tract, and thus saving the iron compounds of the food from being affected by them. This would explain the greater use of large doses of iron, which often succeed when small doses fail. For these reasons this patient is getting large doses of tr. fr. perchloridi. This will explain, also, the reason that so many of the more pleasant compounds containing iron fail in anæmia; they are of use chiefly on account of the other ingredients, as quinine, strychnine, etc., which enter into these compounds. They do not contain enough iron to neutralize these intestinal poisons, and therefore usually fail where tr. fer. mur. succeeds. The prognosis, usually favorable in chlorosis, is unfavorable here, on account of its imperfect circulation and consequent dropsy. Chlorosis seldom, if ever, proves directly fatal, but it renders its subjects more liable to, and less able to resist, other diseases, especially gastric ulcer and tuberculosis.

Case 2.—Ellen F., servant, æt. 34. Another case of chlorosis, lacking the typical appearance. She illustrates another phase of this disease. She was well, menses regular, up till 20 years of age. For next 7 years was troubled much with indigestion, and during last 7 years she has become ill about November of each year, illness lasting a variable time. Complains of weakness, breathlessness, general headache, faint feelings, etc. Since the age of 20, menses have been irregular. Now there is only a stifled colorless monthly discharge, lasting one day.

Her appearance, you notice, contrasts strongly with the last case, and she lacks the fat appearance, though not emaciated. She is pallid, with slight yellow tinge and dark pigmented area below the eyes, indications of bad digestion. There is no œdema; appetite fair: bowels free before coming to the hospital, constipated since. The heart, lungs, and other organs appear normal. Urine is very pale at times, copious; sp. gr. 1012, slightly acid. These characters are especially marked when she is nervous and hysterical, as she is frequently. There are hæmic murmurs at base of neck. The blood contains 2,400,000 red corpuscles per cmm., about 50 per cent. of the normal number. The corpuscles are normal.

There is little here to distinguish it from an ordinary case of simple anæmia from dyspepsia and mal-assimilation, and it might be classed as one. There is not a distinct division between the two conditions. In typical chlorosis, besides the characteristic appearance of the patient, the blood presents a greater reduction of its hæmoglobin than of its corpuscles; *e.g.*, there may be 75 per cent. of the normal number of corpuscles present and only 50 per cent. of hæmoglobin.

Chlorotics may be conveniently divided into two classes: First, those who acquire the disease after maturity, as in these two cases; these are the most frequent, and are usually quite successfully treated, though liable to relapses. In the second class, the disease begins with puberty. In these, according to Virchow, there is immaturity of uterus and ovaries and of the heart and large vessels. He found the heart small and the aorta small and its walls thin. For example, he found, in fully developed women, specimens in which the aorta would receive only the little finger, while normal aorta should admit the thumb. Others, again, deny that such immaturity ever results from chlorosis simply, or rather occurs in chlorosis apart from other causes. Fagge says that in those cases

with small aorta there has been present stenosis of the mitral or aortic orifice; that such was the case in some, at least, of Virchow's own cases. In cases with such stenosis occurring early in life, the aorta is not rarely found narrow throughout its whole length.

The division of chlorotics into these two classes is useful, however, from a clinical point of view, as those in whom the symptoms show themselves later in life respond much more readily to treatment, and in them the prognosis is better, as to permanent cure, than in those in whom the disease manifests itself at or before puberty.

Case 3.— Pernicious anæmia. By way of contrast the following case, at present under treatment, offers a striking example: Mrs. S., æt. 50, a seamstress. Had always been a hard-working, vigorous woman until early last summer, when she began to lose color and strength. Her digestion became poor, with occasional attacks of vomiting and frequent diarrhœa, the stools being usually rather offensive. Her condition, with occasional periods of improvement, gradually grew worse throughout the summer and autumn, with development of a decidedly greenish-yellow color, similar to Case 1. She also became more than usually stout. Later, considerable œdema occurred. I saw her first about Christmas, when she was scarcely able to leave her bed. Her lips and tongue were very pale; conjunctiva pearly; finger nails without color: temperature, from 98° to 100°; pulse, weak. She had attacks of vomiting, with slight fever, every few days, and diarrhœa was troublesome. No evidence of disease could be found in any organ. This is a sample of the urine passed during one of those paroxysms. You observe it is a very dark, port wine color. It becomes much paler, though still dark, on the days on which she feels better, at which time there is no vomiting and often no diarrhœa. With a return of the slight feverishness with vomiting, the urine again becomes dark. The urine contains no albumin, but a good deal of granular pigment; sp. gr. 1022, low for such dark urine; it is decidedly acid. Sp. gr. does not fall when it becomes paler.

The blood appears dark; on the slide the corpuscles tend to form clumps, but not rouleaux There is considerable irregularity in their shape, and the great majority of them measure from 10 to 12 *m.*; the normal, you know, is about 7.5 *m.* There are some microcytes but not many, and very few very large corpuscles. There is a good deal of granular débris in the blood. The number of corpuscles per cmm. was about 1,000,000, and the amount of hæmoglobin was certainly in greater proportion. The number of red corpuscles, you see, was the same as in Case 1, but the blood was much darker.

A diagnosis of pernicious anæmia was made on the following facts: The gradual onset of the anæmia without apparent cause except disturbed function of stomach and bowels; absence of emaciation; the lemon-yellow tint; the slight fever, occurring paroxysmally; the irregular vomiting and diarrhœa; the urine, dark at all times, but especially so during the paroxysms: its relatively low sp. gr. and abundant pigment deposit; the condition of the blood. Most of these symptoms might occur separately in many diseases, but collectively in probably no disease but pernicious anæmia. The condition of the urine is especially significant: Acid, low sp. gr., with high color. The sp. gr. in this case is higher than in any case that I have seen. It has always been below 1020 in other cases. This may be due to the very weak circulation in this woman, which led also to the anasarca. The condition of the blood is probably pathognomonic. In no other disease is the diameter of the great mass of red corpuscles increased to 10 to 12 *m*; some very large corpuscles may be present in any grave anæmia, but not this fairly uniform moderate enlargement. The disease, as you already know, is characterized by great destruction of blood corpuscles in the portal vein, more or less paroxysmal, probably by some poison of the nature of ptomaine absorbed from the intestinal tract. The excretion of the pigment resulting from this rapid destruction accounts for the dark urine, the sp. gr. of which is low on account of defective metabolism in the tissues generally. On account of this great destruction of corpuscles, the bone medulla is stimulated to its utmost in the attempt to furnish new corpuscles to take the place of those destroyed. Consequently immature large corpuscles are thrown off; and as no other disease is characterized by such rapid destruction of

corpuscles, no other disease would, consequently, be characterized by the presence of such general enlargement of red blood corpuscles.

The first and third of these cases have certain points of great similarity. For example, absence of emaciation, as occurs in primary anæmias generally; the pallor with the lemon-yellow color; the weakness; and the great reduction in red corpuscles. The points of difference are: The character of the urine; the relative proportion between corpuscles and hæmoglobin; the normal corpuscle of the chlorotic case as contrasted with the typically altered corpuscle of the case of pernicious anæmia; the anæmia of the chlorotic case resulting from deficient production of corpuscles without increase in destruction of them; in the other, the anæmia resulting from excessive hæmatosis in the portal system, which hyperactivity of the blood-forming medulla makes vain efforts to repair; lastly, the prognosis differs widely, generally favorable in the one, while the other terminates too often fatally, even when most judiciously treated.

The treatment of pernicious anæmia may be summed in one word—*arsenic*. Of course, good nourishment must be given, and intestinal antiseptics, as beta naphthol, may be of benefit, although I cannot say that I have had any good from their use. To this patient liquor arsenicalis was given every three hours, after nourishment, mij at first, and gradually increased to mv, so that she has been taking from 30 to 35 minims per day. This was continued for six weeks without any sign of disturbance of stomach, by which time the blood contained over 2,500,000 corpuscles per cmm., of almost normal appearance, the œdema and lemon color had disappeared, good color had returned to lips, tongue, and nails, and the woman was able to walk out. Appetite returned, and she was able to take ordinary diet with relish. The urine became normal. Then, lest the arsenic should cause peripheral neuritis, it was stopped and dilute muriatic acid and nux vomica are now being taken. If necessary, arsenic will be given again, but I have seen one case continue to improve uninterruptedly without its further administration. Arsenic probably acts on the corpuscles, enabling them to resist the poison, thus preventing their destruction.

The greatest patience and perseverance is needed in treating these cases until they begin to improve well. They find it difficult to take both medicine and food; vomiting is usually fairly frequent, and diarrhœa much more so. They are extremely weak and low spirited, so that much tact and hopefulness is needed in their management and nursing. If the case is far advanced and the stomach does not retain the arsenic, it would be well to resort to hypodermic injection for a few days, and nourishment by the bowel should be tried.

These cases can scarcely be diagnosed with certainty before the red corpuscles are reduced below 50 per cent. of the normal. The natural pink color of the finger nails will be preserved until this reduction is reached at least, so that if the nails are pallid we may be certain that at least 50 per cent. of the corpuscles are lost and probably more.

In giving a prognosis in pernicious anæmia, it must be borne in mind that there is great liability to relapses. The histories of cases in the past have shown that the majority have ultimately died notwithstanding the most judicious treatment perseveringly carried out; but more recent results have I think, been more favorable as arsenic has been given more perseveringly and more freely.

It will be found of practical use to remember that in the treatment of anæmias, as a rule, arsenic should be given in all cases in which the amount of hæmoglobin is in excess of the red corpuscles, and iron is indicated when the hæmoglobin is in equal or less proportion than the red corpuscles. In Case 1 arsenic was, I understand, given freely for over a month without any improvement, while the condition of the blood has improved somewhat with the free administration of iron; yet, of course, we do not expect much improvement in view of the disease of the heart and the resultant anasarca. Likewise in Case 3, iron had been given freely for a long time without benefit; of the results with arsenic I have already told you. Arsenic does equally well in some cases of splenic anæmia.

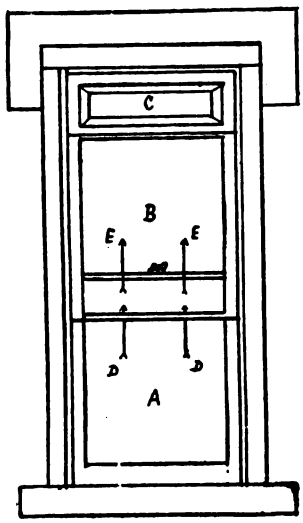
SIR JAMES PAGET'S SON is an English clergyman, and has recently been appointed Dean of Christ Church, Oxford.

A NEW VENTILATING APPLIANCE.

BY A. M. ROSEBRUGH, M.D.,
Late Surgeon to the Toronto Eye and Ear Infirmary.

I desire to call the attention of the profession to a new appliance for window ventilation. The object is twofold: Firstly, to afford diffusion of fresh air without perceptible draughts; and, secondly, to make the ventilating appliances in a form that will add to, rather than detract from, the appearance of the windows and the building, and thus to make them self-recommendatory.

The ventilating appliance consists of a short supplemental sash — preferably ornamental — placed at the upper part of and outside of the window, and close against the top part of the



OUTSIDE VIEW OF WINDOW VENTILATOR.

A, lower inside sash; *B*, upper outside sash; *C*, supplemental sash; *D E*, *D E*, arrows, representing ventilating space between sash *A* and sash *B*.

upper sash. This supplemental sash placed in this position affords simple means for changing a direct draught into an indirect draught when the top sash is lowered for ventilating purposes. The extra sash forms a block to the passage of a direct draught over the top of the upper window sash, while a syphon-like space is afforded for the passage of an indirect draught by the overlapping of the upper and lower sash. It is not new to ventilate buildings by utilizing the space caused by the overlapping of the two window sashes, but heretofore this was done by the cumbrous method of placing a piece of planking below the lower sash. The cumbersomeness of this method has prevented its general adoption.

By placing the ventilating appliances at the top instead of at the bottom of the windows, by making them a fixture requiring no attention, and by substituting ornamental sashes for unsightly loose pieces of planking, the new ventilating appliances become self-recommendatory. They render window ventilation simple and easy, and I see no reason why they should not make it popular as well.

By admitting the fresh air between the overlapping sashes three important points are gained, viz.: Firstly, by treating several or all the windows in this manner, the number of inlets and outlets prevent the concentration of the draught at any one point in the room, the fresh air is diffused, and perceptible draughts are avoided. Secondly, the inlets are at the right height to prevent unpleasant draughts on the person. W. P. Buchan, in his late work on ventilation, states that five feet six inches from the floor is the very best point for the admission of fresh air into a living room or a sleeping chamber. Thirdly, by admitting the fresh air through the syphon-like space between the overlapping sashes the fresh air is directed upward towards the ceiling. This can be very easily verified by a simple experiment; as, for instance, by using lycopodium seeds or the phosphorous acid given off at the first striking of a match before heat is evolved from the burning of the sulphur.

With a view of testing the efficiency of the ventilation, the following tests were made at my consulting rooms, where I have four windows equipped with the ventilating appliances, viz., two windows facing the west and two windows facing the east, and the two rooms *en suite*. On December 2nd, with the air meter, I found the air entering between the overlapping sashes at the rate of 240 feet a minute, and on December 12th at the rate of 440 feet a minute. On both occasions the wind was from the west. This gave 3000 sq. ft. per hour on the 2nd, and about 5500 sq. ft. on the 12th, as the two windows on the west gave a total ventilating space of 30 inches.

Where windows on opposite sides of a room or building are equipped with these ventilating appliances, both an inlet for fresh air and an outlet for foul air is afforded—"cross ventilation"—the direction of the current varying with

the direction of the wind. This method of admitting fresh air may be combined with any of the usual systems of removing foul air, such as by the use of fans, by cowls, or by artificially heated flues.

This system of ventilation, it seems to me, is particularly well adapted to bedrooms and sick chambers, where it is desirable to have a constant supply of fresh air with freedom from unpleasant or dangerous draughts. It may also be made to supplement any other system of ventilation.

I have suggested to some parties the propriety of taking up the manufacture and putting in of these ventilating appliances as a business, but so far without success. If the co-operation of the medical profession could be assured, there would be no difficulty. Would it be too much to bespeak such co-operation?

With regard to the question of cost, I find that plain ventilators, suitable for bedrooms and rear premises, can be put up for about 50 cents each, while ornamental sashes would cost from $1.25 up, according to width of window and according to the style of the ornamental glass.

Selections.

OXYGEN GAS IN ACUTE RESPIRATORY AFFECTIONS.

BY E. MARKHAM SKERRITT, M.D. LOND., F.R.C.P.,

Senior Physician to the Bristol General Hospital; Lecturer on Medicine at the Bristol Medical School.

My experience of the effects of oxygen in the following case has convinced me that Drs. Lauder Brunton and Prickett have done good service in calling attention afresh to the therapeutic use of this gas. As in the instance which they describe, a fatal issue was not averted, but the effect was such as to indicate the probable value of oxygen under more favorable conditions.

Last October, Dr. Parsons, of Cotham, asked me to see in consultation with him a gentleman, æt. 66, who for many years had suffered from bronchitis and emphysema. At that time there were no urgent symptoms, but the patient had advanced pulmonary emphysema, with secondary dilatation of the heart, and in consequence was always the subject of more or less dyspnœa.

On January 24th I saw him again in consultation with Dr. Parsons and Dr. Newman, of Bristol. His temperature was then 102.8°, and he was wandering; dyspnœa and cyanosis were very marked, and extensive bronchitis and broncho-pneumonia existed. Next day there was no improvement, and we therefore decided to administer oxygen. At 7 p.m., when the inhalations of the gas were begun, the pulse was rapidly failing, the surface was very dusky, and the patient was fast approaching his end. The immediate effect of the oxygen was most striking; the pulse improved wonderfully in tone, and the cyanosis completely disappeared; as the hands were watched the blue color under the nails could be seen fading away and giving place to a healthy pink. The change was so marked that it was evident to all present. When the inhalation had ceased for a few minutes, however, the pulse again began to fail and the cyanosis to return—to be again removed by the fresh administration of the gas. This sequence recurred again and again, until at length the oxygen was given more or less continuously. Strychnine was also injected subcutaneously. In the early hours of the following morning, however, the effect began to be less marked, and the patient gradually sank and died about 9 a.m.

The influence of the oxygen in this case in removing cyanosis was extraordinary and altogether beyond doubt. The conditions under which it was given, however, were most unfavorable. The occurrence of extensive bronchitis and broncho-pneumonia upon long-standing and advanced emphysema, with weakened heart, made the outlook practically hopeless; but we were convinced that at all events life was prolonged by some hours, and Dr. MacCarthy, of Worcester, who was present during the night and kindly helped with the inhalations, concurred in this view. In my article in Cassell's *Year Book of Treatment for 1892* (p. 40, sec. 2) reference is made to a case of pneumonia reported by Dr. Blodgett, in the *Boston Medical and Surgical Journal*, in which the influence of oxygen is said to have been "almost as pronounced and evident as is that of ligature in hemorrhage," and in the face of our experience this can hardly be considered an exaggeration. I have never seen such an extraordinary effect upon cyanosis produced by any other means, and, for the future, in any case of acute respi-

ratory affection threatening to prove fatal I shall not consider that everything practicable has been done unless a fair trial has been given to oxygen.

The gas was obtained in cylinders from Brin's Oxygen Company, 34 Victoria St., Westminster, and by the courtesy of the local agent, Mr. C. H. James, of 30 Broad St., Bristol, it was received in Bristol within five hours of the despatch of the order. The company supply a simple apparatus, consisting of a rubber bag connected with the cylinder, and also with a tube, to which a mouthpiece can be attached. The bag can be hung up above the level of the patient, so that the gas which enters it from the cylinder escapes slowly through the delivery tube by its own weight and the collapse of the bag.

When the inhalation was begun the patient was breathing through the mouth; but directly the end of the tube was put into his mouth he grasped it with his lips and breathed through the nose alone. The tube was therefore fitted into an ordinary naso-oral celluloid inhaler, which answered well. No unpleasant effects were produced. It is better to use the bag rather than to give the gas direct from the cylinder, as it is contained in the latter under such pressure that it is difficult to regulate its escape.

Now that pneumonia and bronchitis are so prevalent and so fatal, the recognition of the value of oxygen in staving off asphyxia and stimulating the heart may lead to the saving of life in otherwise hopeless cases.—*British Medical Journal.*

EPISTAXIS—AN EASY AND EFFECTUAL METHOD OF PLUGGING.—Undoubtedly, plugging the nares by aid of Bellocq's cannula is an excellent method; but occasionally, especially in country practice, a Bellocq's cannula is not at hand, and some method easy, effectual, and effected by materials always within reach, must be resorted to. Such a method I have found in the following. A piece of old, soft, thin cotton or silk, or oiled silk, about six inches square (a piece of an old handkerchief will answer) is taken, and, by means of a probe, metal thermometer case, or penholder, or anything handy, is pushed centre first, umbrella fashion, into the nostril, the direction of pressure when the patient is sitting erect being backwards and slightly downwards. It is pushed on in this fashion until it is felt that the point of the "umbrella" is well into the cavity of the naso-pharynx. The thermometer case or probe, or whatever has been employed, is now pushed on in an upward direction and then towards the sides, so as to pull more of the "umbrella" into the naso-pharynx. The thermometer case is now withdrawn. We have now a sac lying in the nares, its closed end protruding well into the pharynx behind, and its open end protruding at the anterior opening of the nares. If it be thought necessary, and is convenient, the inside of the sac may be brushed with some household astringent, such as alum solution, turpentine, etc. A considerable quantity of cotton wool is now, by means of the thermometer case, pushed well back to the bottom of the sac. Then, the thermometer case being held firmly against the packed wool, the mouth of the sac is pulled upon, and thus its bottom with the wool packed in it is pulled forward, and forms a firm, hard plug wedged into the posterior nares. We may now pack the sac full of cotton wool, dry or soaked in some astringent solution. The mouth of the sac may now be closed by tying it just outside the nostril with a piece of strong thread; it is then trimmed by scissors and the ends of the thread secured outside. The foregoing method is easier than any I know when both nostrils have to be plugged. It might be suggested to oil the cotton or silk in order to render its introduction easy and to prevent it adhering to the mucous membrane, and to render it easy of removal; but I have never found any difficulty without the oil, as the blood renders the material wet and easy of introduction, while the oil does not facilitate removal, and may modify the effect of the astringents that may be used. The plug may remain *in situ* as long as any other nose plug. In removing the plug, open the mouth of the sac, and with small dressing forceps remove the cotton wool bit by bit; if there is bleeding, simply syringe the sac with weak carbolic lotion, or Condy's fluid, and repack with clean cotton wool, or wool impregnated with some antiseptic. If there is no bleeding when the wool is picked out, gently pull out the sac; or if it be adhering to the mucous membrane, syringe in a little warm water, and it may then easily be removed. This method has many advantages. (*a*) It is easy, quickly

accomplished, and effectual, and the materials are to be found in every house, and, indeed, about everybody's person (I have plugged in this manner, simply using a handkerchief, one part of which was used for the sac, and the other, torn into narrow strips, in place of the cotton wool); (*b*) no damage is done to the floor of the nose or back of the soft palate by strings, etc.; (*c*) no disagreeable hawking, coughing, or vomiting takes place while the plug is introduced; (*d*) there are no disagreeable strings left hanging down the throat, causing coughing or sickness while the plug is in; (*e*) the plug can be removed gently without any force, so that no damage is done to the mucous membrane and no return of hemorrhage caused.—*A. A. Philip, M.B., C.M.—Lancet.*

INFLUENZA IN CHILDREN.—There seems to be a prevailing impression that infants and young children are not attacked by influenza. That this idea is wrong, however, many practitioners can testify; it is naturally difficult to diagnose in such patients, but the fact that they sicken when their parents or nurses are affected with the disease is strong presumptive evidence that they also are attacked. Dr. David Fuchs, of Budapest, is of this opinion, and publishes a short article on the subject in the *Allgemeine Wiener Medicinische Zeitung* of Jan. 19th of this year. He states that he has met with many cases of influenza in young children, but that the symptoms and course of the disease differ in some particulars from those occurring in the adult. As a rule, the attack is lighter. It commences with fever, and the onset is sudden. One day the child may be perfectly healthy, whilst on the next it is severely ill without any prodromal symptoms having developed. The temperature does not generally rise above 103° F., though it may occasionally be as high as 104°. After lasting twenty-four hours, the fever commences to subside. With many children cerebral symptoms predominate. Dr. Fuchs records one case in which a child, aged eighteen months, was, without any warning, seized with severe laryngeal symptoms, followed by convulsions, whilst the temperature rose rapidly to 104°. Vomiting is a very common symptom. Next in frequency come affections of the mucous membranes. The conjunctivæ are injected, and there is catarrh of the throat and nasal passages. In this stage the general appearance is very similar to the early stages of measles. The tongue is coated, and the child gradually subsides into an apathetic state. Older children complain of severe headache. The bowels are usually confined. There is not unfrequently a peculiar rash; it appears on the trunk and lower limbs, and takes the form of small papules not unlike the exanthem of varicella. Its extent varies greatly, and the number of spots may be very few or the reverse. In one child eighteen months old a few small pemphigus vesicles appeared on the backs of the legs, which were at first filled with a clear fluid, but afterwards dried up. Bronchial catarrh, usually slight, frequently follows. After these symptoms have lasted a few days, the temperature becomes normal, and the inflammation of the conjunctivæ and nasal mucous membranes disappears. The other catarrhal phenomena last longer, and the troublesome cough is difficult to get rid of. The exhaustion is considerable, and even after an illness of only three days a strong child will be very much pulled down. The prognosis is in nearly all cases favorable. Although weakly children suffer more than those who are stronger, serious complications rarely set in, and pneumonia is but rarely met with. The treatment is symptomatic, and Dr. Fuchs advises that no antipyretic drugs should be given, as they only tend to depress the patient. He recommends isolation.

THE CENTRE FOR HEARING.—A case of no little interest and importance in this connection is recorded by Dr. C. K. Mills in the current number of *Brain*. The patient, a woman of forty-six, was admitted to the hospital in August, 1891. Her history made it probable that she had suffered from specific disease. She was right-handed. Fifteen years before she had a "stroke," which left her word-deaf, but not paralyzed. She could hear musical and other sounds, but she could not understand words; yet she could apparently read and understand a paper, although in an attempt at reading aloud she made a jumble of the words, and a similar imperfection was present during ordinary attempts at speaking. She was able to write, but wrote wrong words. Six years later she

had another stroke, affecting the left side of the body, and leaving her partially paralyzed on that side; then her hearing was much impaired, so that there was not only word-deafness, but deafness also for ordinary sounds. Her condition, when examined by Dr. Mills, was one of almost complete helplessness. It was impossible to make her understand what was said to her, and after repeated tests the conclusion was come to that she was totally deaf. She died of exhaustion, and at the necropsy the left superior temporal convolution was found to be much atrophied, except anteriorly. In the posterior fourth of the second temporal convolution and the parallel fissure was a depression or cavity, at the bottom of which was a small mass of shrivelled tissue, which was regarded by Dr. Mills as the remains of an old patch of softening. The rest of the temporal lobe was normal, but there was a considerable amount of atrophy around the ascending branch of the Sylvian fissure and the bases of the two central convolutions, as well as in the hinder part of the third frontal. In the right hemisphere was an old hemorrhagic cyst, completely destroying the first and almost completely the second temporal gyrus, the island of Reil, and the convolutions behind, as well as part of the ascending convolutions and of the central substance. The auditory nerves were atrophied, and the striæ acousticæ are said to have been invisible to the naked eye. From this case Dr. Mills thinks he is justified in contending that the centre for word-hearing is situated in the hinder thirds of the first and second temporal convolutions, and is possibly restricted to the second; and that although the auditory cerebral arrangements have their chief development in the left temporal lobe, destruction of the opposite centre is necessary in order to abolish hearing entirely. Several minor conclusions are also drawn, but the above are the most obvious.—*Lancet.*

THE PAN-AMERICAN MEDICAL CONGRESS AND THE ROME MEETING.—The fact that the Pan-American and the International Congresses are to meet in the same year, and both of them in the autumn, has given rise to the impression among some that the former was conceived in opposition to the latter. Nothing, we are persuaded, can be more erroneous than this idea, and we believe that, so far from interfering, the Pan-American will actually help to increase the attendance at the Rome meeting.

The promoters of the Pan-American Congress were at pains to ascertain the date of the Rome meeting, so that there might be no interference, and with this object wrote to Dr. Baccelli several months ago. The latter replied that the Rome meeting would probably be held during the last week of September or the first week of October, although the exact time had not been definitely settled upon. This reply was not received until after the meeting of the Committee in St. Louis, when the date of the Pan-American had been already fixed for the first week in October; but when it was learned that this would interfere with the International, the time was changed to the first week in September. This will make it easy for those who desire to attend both meetings to do so, and is evidence that the Committee of the Pan-American Congress desire to promote rather than to antagonize the International. The Washington meeting must, of course, be held in 1893, in order to afford the opportunity to the Latin-American members of visiting the World's Fair, and the fact that that is also the year for the assembling of the International Congress is but a coincidence, which will, however, be of distinct advantage to both bodies.

The organization of the Pan-American Congress is in the hands of good men; the National Committee is a thoroughly representative one, and the delegates thus far selected from the other countries of the Continent are men of eminence at home, and many of them of an international reputation as well.—*Med. Record.*

DIET IN TYPHOID FEVER.—In the *Medical and Surgical Reporter* (December 5, 1891, p. 889) Dr. Lehlbach emphasizes the fact that typhoid fever is a wasting disease, and calls attention to the researches of Professor Ernst Kohlschütter, who found that a curve representing the waste of tissues in typhoid fever always followed a uniform course, the amount of waste being in direct proportion to the height of the fever. Have we yet found a food which will compensate for the loss? is the question he raises. Only a small part of albuminous foods can be assimilated by a fever patient. A large

detritus is left, therefore, which must greatly irritate the typhoid ulcers if allowed to pass over them. From observations that Lehlbach has made among numerous typhoid stools and at autopsies on several cases, he is convinced that very little of the casein of the milk is really digested, and the other constituents—the milk serum, with its salts, its sugar, and its cream—"form the essential elements of nutritive value in these conditions." He believes, therefore, that milk is not a perfect food in these cases, and its use should be restricted. He advises the addition of carbo-hydrates to the dietary, such as boiled rice, either with or without milk. "The food thus converted into caloric saves so much of the living tissue from being burnt up." The dryness of the mouth and tongue, so often present in this disease, is less apt to annoy the patient under such a diet, than with milk alone. In addition, he advises giving a small amount of one of the malt extracts to promote assimilation. His results have been very satisfactory. —*International Medical Magazine.*

THE OFFICIAL INFLUENZA INQUIRY.—We are able to state that the President of the Local Government Board, after consultation with his official medical advisers, has decided, in lieu of obtaining a Royal Commission, to institute a special inquiry—under the direction of the Medical Department of the Board, and, with the aid of its officers and of outside scientific experts, such as Dr. Klein, whose assistance will be summoned—into the clinical characters (symptomatology, causation, mode of diffusion, complications, etc.) and the pathological nature of influenza. The inquiry will proceed on the lines indicated in the last paragraph of Dr. Buchanan's comment on the report of Dr. Parsons, May, 1891, and will include the study of the natural history of the disease, and of more authentic methods of identifying influenza proper from among the various *grippes*, catarrhs, colds, and the like, among men and animals. This may lead to earlier identification of first cases. It will be an object also to acquire better insight into the characters, habits, and conditions of multiplication of the material of influenza, with a view to acquiring by other methods further and better safeguards against the disease. It is felt that our prospects of dealing with influenza epidemics by isolation and disinfection are not particularly encouraging, and it is hoped we may get suggestions of other methods available for repressing the disease.—*British Medical Journal.*

THE OPERATIVE TREATMENT OF THE ENLARGED PROSTATE.—(1) Prostatectomy is justifiable, and does what nothing else can. (2) The perineal operation is somewhat less severe, but decidedly less reliable than the suprapubic; it should rarely be preferred, unless there be urethral complications. In very feeble men it may still be elected. (3) The operation is not justifiable, with present statistics, if the patient can be comfortable in catheter life. (4) No physical condition of the parts or of the patient short of a practically moribund state contra-indicates operation. By it in desperate cases life is often actually saved, although the operation is a grave one, and its mortality high. (5) With the rongeur—better than any instrument—the bladder outlet can be lowered, and polypoid or interstitial growths jutting into the prostatic sinus can be removed, and these points are more essential to a successful operation than is the taking away of a large portion of the prostatic bulk. The instrument next in value is the curved scissors, but the skilled finger is most important of all. Most of the work has to be done by the aid of touch, as the bleeding soon becomes free and renders visual inspection impossible. (6) Diuretin, perhaps, is of value when the kidneys are damaged. It certainly does no harm. (7) Chloroform alone should be used as an anæsthetic, for the sake of the kidneys.—*Keyes in Med. Rec.*

THE ORIGIN OF THE NAME "GRIPPE."—In a meteorological journal kept in Versailles, in 1743, it is stated that during the months of February and March there were many cases of nasal and bronchial catarrh, and that "the king (Louis XV.) named this disease *la grippe*." In the same journal it is remarked that bleeding was not useful, but that those who had not been bled and who drank a great deal recovered much the most rapidly from the attack.—*N. Y. Medical Record.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

When a change of address occurs please promptly notify the Publishers, THE J. E. BRYANT COMPANY (*Limited*), 58 *Bay Street.*

TORONTO, MARCH 1, 1892.

MEDICAL COLLEGES IN NORTH AMERICA.

Certain references were recently made by the *Philadelphia Medical News* which do not show a very intimate knowledge of the merits of a medical training in Canadian colleges as compared with those of the United States. We quote the following from an editorial which appeared in the *News*, Feb. 6th :

"It is true that in the past a comparatively small number of students have come to our leading schools from the South American countries or from Canada. We believe this has been largely because the standard required in our schools and the facilities and equipment provided have not been such as to commend themselves in contrast with the schools of Europe and Great Britain. But, fortunately, just at this time it has been decided that a compulsory four years' course of medical study shall be required at a number of our leading schools, and important improvements also are being made in all the facilities for instruction. There can be little doubt that, if the Pan-American Medical Congress is made as great a success as it should be, all the great schools, from New York to Illinois, will derive valuable results in the form of steadily increasing numbers of desirable students from Canada and the South American countries."

We do not wonder that the *News* feels pleased that a number of "our leading medical schools" (a comparatively small number, by the way) have decided on a four years' course; but we are surprised that, through ignorance or some other unknown cause, it ignores the fact that a four years' course has been required by some of our Canadian universities for over twenty years. The Ontario Medical Council has demanded such a course for nearly the same length of time, and, under its new regulations, which come into force this year, will require attendance on lectures for four winter courses, one summer course, and, in addition, a fifth year of study, which must include an attendance of at least six months in some hospital or scientific laboratory. It will thus be seen that our requirements for an ordinary medical course have always been in advance of those in the United States. A more important fact still, however, remains to be told: Our matriculation standard is far above the ordinary standard of the United States. We may go farther and say that the requirements for matriculation of the Ontario Medical Council to-day are higher than those of any one college in that country.

The *News* thinks that the number of students who have gone from Canada to its country have been comparatively small. The *News* is right, but does not appear to realize the whole truth, even in this connection. We may tell the *News* that this comparatively small number is, with few exceptions, made up of weak men who go over to our neighboring republic on account of the grand facilities there afforded for running them through a medical course in the shortest and easiest way possible. The weaklings thus rushed through the mills of the United States do not and can not, as a rule, come back to this Dominion to practise, but remain in the country that furnished the cheap and rapid facilities for graduation. There are many magnificent teachers of medicine in the United States, and the large cities of that country are rich in clinical material, and, as a consequence, the excellent post-graduate schools which have been organized in some of these centres attract some of our graduates. While this is true, the broad fact remains that our undergraduate course in our best colleges is equal to, and probably superior to, the best in any city of the United States.

DR. A. H. PAQUET, Professor of Clinical Medicine in the Medical Department of Laval University, Montreal, died recently at St. Cuthbert.

PHYSICIANS' SIGNS.

There is no absolute law as to the form or size of a doctor's sign, which must depend to some extent on individual tastes. The *New York Medical Record* tells us something about the customs in various parts of the world, as follows: "The fashion in various cities in Europe as to the door-plates and signs of physicians is interesting in its variety. In London a large door-plate of brass or silver is the thing. In Brussels the outside of the house is sometimes decorated *à la* New York, but generally with more taste. There professional men do not hesitate to announce their specialty. In Berlin, where a celebrated man may be one or more flights up, a porcelain plate neatly inscribed with black letters, sometimes with the specialty, and always with the office hours, is in good form. In Paris there is such an absence of signs or door-plates that it is in many instances difficult to know that you are at the right house, so modest or negative are the indications. In Paris, too, distinguished specialists sometimes live very high up, in great apartment houses without elevators. Philadelphia and Boston outdo New York in the magnitude and splendor of door-plates and office-signs. It is doubtful if they are ever of any particular use, except for those who are looking for a doctor in an emergency, and a very simple indication would be as well as the great sprawling tin, or black marble, or brass affairs that disfigure many a good-looking house."

Those who have watched the evolution of medical sign-growing in this city must acknowledge that in some respects Toronto "beats the record." Our abominations in variety and vulgarity are becoming positively unique. In olden times a plain brass or silver door-plate sufficed. Then came the ugly fanlight with its letters in black, gold, etc. Next in order came window decorations of various kinds. Then in rapid succession the ornamentation extended to walls of the house, gates, fences, conveniently situated trees, etc. The walls of neighbors and finger posts were in due course called into requisition, and signs such as the following are to be seen: "Dr. Wiseman, —— doors north." Occasionally a sign, in the shape of a pine board, decorated with the name of some distinguished physician, and a huge hand with forefinger pointing in the direction of his residence, may be seen nailed to a post on a vacant lot on some of our more remote streets. It doesn't take a man long to find a doctor in Toronto; and if he should happen to miss the physician or surgeon he is quite likely to strike a druggist who is ever ready to treat a fractured skull or a diseased heart. Verily Toronto is twice blessed, if not more so.

INTERNATIONAL CONGRESS OF GYNECOLOGY AND OBSTETRICS.

Another congress is under way with the above title. The first meeting will be held in Brussels, September 13 to 19, 1892. It is proposed that the congress shall assemble every four years, and it is hoped that the various countries of Europe and America will give it a cordial support. Mr. Lawson Tait has been asked by the committee of management to act as chairman, and has consented to do so. It has been arranged that there shall be three special discussions on the following subjects:

(1) Pelvic Suppurations. Referee, Dr. A. Legond, of Paris.

(2) Extra-uterine Pregnancy. Referee, Dr. A. Martin, of Berlin.

(3) Placenta Prævia. Referee, Dr. Berry Hart, of Edinburgh.

The secretary-general of the congress is Dr. Jacobs, of Brussels, and the secretary for America is Dr. Fernand Henrotin, of Chicago.

Meeting of Medical Societies.

TORONTO MEDICAL SOCIETY.

February, 1892.

The president, Dr. A. A. Macdonald, in the chair.

Dr. Allen Baines read the following notes on a case of

PAROVARIAN CYST.

Mrs. G., aged twenty-five. I attended this lady first in February, 1887. At that time I found her suffering from pelvic cellulitis, caused by cold caught in the sleeping car coming from Montreal. She had her menses, which commenced the day before starting. The flow was stopped and she felt some slight pain. Cohabitation with her husband was tried, but the intense pain she suffered caused him to desist. Next day he sent for me. I found her in a high fever, rapid pulse, etc., all the regular symptoms of inflammation—great

tenderness of the abdomen, low down—and examination per vaginam almost impossible from the acute pain the slightest touch caused her. Under appropriate treatment she recovered. She never became pregnant, and marital relationship was normal until six months ago. However, from the time of this cellulitis she was never quite herself, and came to my office occasionally, complaining of some slight pelvic pains. The uterus was movable, though tender. The tubes and ovaries seemed normal. Being anxious to have children, I dilated the os and cervix with electric dilators, causing no pain, until I could put my little finger up the canal. However, this did no good. Four months ago she began to have extremely painful periods. I never saw any one suffer such agony. I gave all sorts of drugs with no avail. Morphia she could not or would not take on account of the prolonged and distressing nausea. After the last menses I examined her very carefully, and found a cyst on either side, which felt like a much enlarged tube. I called Dr. Temple in consultation, and he agreed with me that operation was necessary at once, we both thinking it was a case of pyosalpinx.

We operated on Saturday last. On opening the abdomen, I found a perfect roof of old dense adhesions, which gave me a great deal of hard digging, accompanied by profuse hemorrhage, ere I could arrive at the tube. At length I got the tumor clear, and found it to be a parovarian, about the size of a hen's egg. In trying to clear the end of the tube from its adhesion to the side of the pelvis, I broke the cyst, which contained clear, limpid fluid, as is found generally in parovarian cysts. The hemorrhage becoming free, we tied in two places and removed the tumor, leaving the fimbriated end *in situ*. The patient here became somewhat collapsed. The left side was not covered with such dense adhesions, but was quite large—as big as a turnip. This was easily ligated and removed, and turned out to be an ovarian cyst. Our attention was now turned to the oozing, which was considerable, from the first pedicles and broken adhesions. We tied many, washed out, and put in a drainage tube before making the abdominal toilet. I sucked out with a syringe the tube, and found pure blood coming up. It seemed a question whether or not to reopen and plug the pelvic cavity with gauze. Here a lesson may be learned. I stayed three hours with her, using the syringe every half hour, each time bring up ʒiii pure blood. Naturally, I was most anxious, and at 9 p.m. had a consultation with Drs. Temple and Macdonald. The oozing was as great as ever, and the patient in great pain. We resolved not to open, but to keep the syringe going every half hour. To still the pain, we gave forty grains chloral by rectum; morphine, from her peculiar antipathy, being out of the question. She had a very bad night, suffering great pain, eighty grains chloral having no effect whatever. Next morning we met again at 10 a.m. I then bethought of etherodyne, a most invaluable preparation of opium; it does not cause vomiting as a rule, and acts rapidly. I gave her twenty minims every hour for four hours, when she went off into a quiet sleep, and has had since no pain whatever. The oozing continued all Sunday, lessening towards night. On Monday it was reddish. Tuesday, all that came was a little pale straw-colored serum, so I removed the tube. She was a little tympanitic; I ordered ¼ gr. calomel every hour, which had the effect of bringing away flatus, but no movement; ʒii magnes. sulph. every hour followed. This had no effect. Injected ʒii ol. R. and ii glycerine, which caused copious movements with any amount of flatus. After this the temperature fell to 99 1/5; pulse, 96. She is hungry, and seems to be going on capitally.

Dr. J. F. W. Ross showed the following specimens:

VAGINAL CYST—ANTERIOR.

The first specimen is one of some interest, chiefly on account of the error made by a former attendant upon different occasions. He told her that she suffered from a prolapse of the bladder, and that nothing could be done for her. The operation was done after the method of Schroëder, owing to the proximity and intimate connection of the cyst to the urethræ.

Case of acute general peritonitis, caused by rupture of a secondary suppuration in an old clot left after intra-abdominal rupture of an extra-uterine gestation. Operation. Recovery.

The patient was seen by me in consultation with Dr. Cuthbertson. Under chloroform a mass was felt in that situation supposed to be so characteristic of parametritis, close to the uterus, between the uterus and the bladder. She had suffered from pain, and had then been laid up with peritonitis. Never missed a month more than a few days. No excessive uterine hemorrhages. I advised removal to the hospital, so that I could watch her. After being in the institution for about a week, she took a pain in the old region. It was not very severe. I saw her and found the temperature up a little and pulse also somewhat elevated. Owing to family sickness, I was unable to visit her for two days. When I called in casually on Friday afternoon, I found her very ill. On Thursday she had a chill; temperature, 103; pulse, 110. Her abdomen was now tender all over. No distension as yet. I gave orders that I would open her abdomen at 9.30 Saturday morning. I diagnosed a ruptured pus sac and general peritonitis.

On opening the abdomen, I found it full of pus and the pelvis full of grumous blood and matter. I peeled off the sac by means of two fingers in the vagina and two in the abdomen. I show it here to-night. It has been examined microscopically and proves to be a tube, the seat of an old gestation with the placenta still *in situ* and a semi-organized clot, looking at its edges like the corrugated wall in the *corpus luteum*, and showing the source of the pus that ruptured into the abdomen. The case is one of extreme interest. The patient made a rapid recovery.

The next specimen is a uterus, the seat of three myomata removed by abdomino-vaginal method. The operation was exceedingly difficult. Two years ago I removed the ovaries and tubes from this patient, but failed to relieve her hemorrhages. At that operation the uterus was firmly bound down, though small. It is now no larger than a large orange. I knew, from careful digital exploration of the uterus, that the tumors could not be satisfactorily removed, and considered that the new abdomino-vaginal method of total extirpation would give her the best chance for her life. Vaginal hysterectomy was out of the question, owing to the adhesions, and abdominal hysterec-

tomy could not be carried out because the uterus was too small. The new operation had in this case one that could not be done by any other method. The patient made an uninterrupted recovery. I intend reporting this case at greater length elsewhere.

The next specimens are small pus tubes and a degenerated ovary from a patient suffering from profuse uterine hemorrhages. The left ovary was nothing but a blood cyst. She has made a good recovery.

Dr. Ross then narrated the following history of a patient on whom he had performed the operation of

CHOLECYSTOTOMY.

Mr. C., aged fifty-five years, a policeman in England until he came to this country a few years ago. While in England he had five attacks of colic. The first one affected him fifteen years ago. It came on suddenly one night, and was not therefore connected with the ingestion of food, or with any injury. The pain was referred to the epigastric region, and accompanied by vomiting. It lasted but a short time. He felt weak for a day or two, and was then as well as ever. There was a considerable interval between the attacks. He had tenderness under the margin of the liver after each attack.

For two weeks he has had continuous pain, and has begun to feel very wretched.

On examination, an indistinct tumor can be felt moving back and toward the median line among the intestines. It evidently has its attachment above. Dr. McMahon asked me to see the case. He thought that the symptoms pointed to the presence of gall stones. I agreed with his opinion, and advised operation. The patient consented.

Operation.—On opening the abdomen, the gall bladder was found distended like a large sausage. On puncturing it with a trocar, the starch-like fluid usually found in these cases escaped. It was not in the least tinged with bile. Forty-four stones were then removed from the gall bladder, and one was felt impacted in the cystic duct. From within the gall bladder this could merely be touched with the finger nail. Efforts to crush it from within were unsuccessful, and manipulation on the outside of the duct could not dislodge it. I therefore incised the duct directly over it, and the stone was easily removed with a small scoop. It was firmly fixed, and reminded me of a small snake that has swallowed a large toad. Bile gushed out of the duct and was caught on a sponge. The duct was then closed by means of two Halstead sutures. A drainage tube was placed in the abdomen over the duct, and one was also placed in the gall bladder. The bladder was fastened to the abdominal wall.

Bile escaped freely for twenty-four hours through the upper tube, and must have proceeded from the incised duct. This then ceased and large quantities of bile were vomited. The common duct was doing its work. On the fifth day the sutures were removed. On the third day the tube was removed from the abdomen, but a drain of iodoform gauze was passed down to keep the track clear for a few days longer.

The patient is doing well. Bile is coming from the gall bladder.

Dr. Ross also read the following notes of

AN OVARIAN TUMOR IMPACTED IN THE PELVIS.

Mrs. H., sent by Dr. R. A. Pyne in October, 1889. I examined her in consultation, and found the uterus evidently the seat of an outgrowth. The uterus and the outgrowth moved together. The mass felt hard; no fluctuation could be made out under chloroform. However, there was an element of doubt on account of part of the history. The patient was unwell regularly, had been married ten or twelve years, had never been pregnant, and never had gonorrhea. Shortly after her arrival in Canada she consulted a physician, who told her that the womb was enlarged and that she must be pregnant. Owing to abdominal pains, she at length consulted Dr. Pyne. I felt some doubt about the nature of the tumor, and advised exploration. A day or two after her removal to the Woman's Hospital a swelling presented itself in her left groin. The temperature became elevated, and I opened a large abscess that led down to the side of the uterus, apparently into the left broad ligament. After this had contracted, so that only a small sinus was left, the patient insisted on going home. I then, from time to time, endeavored to heal the sinus, but without avail. Complaining again of pain some months after this, she again came into the hospital for a short time, but now I felt so sure that the tumor was a fibroid from so many examinations that I felt sure that nothing but a desperate hysterectomy would cure her. She again went out, refusing to run any great risk, and I lost sight of her for many months. She again came back, with the old sinus still running, but looking the very picture of health. She had suffered so much pain that she had made up her mind either to "be quit of her tumor, or quit of the world," as she expressed it. A week ago I prepared the patient for abdomino-vaginal hysterectomy. After placing her in Trendelenburg's position, I made a good, free incision. The first thing encountered was a large intestine firmly adherent, and matted so that no headway could be made. A portion of the anterior and lower surface of a fluctuating mass could be reached by raising up the bowel. Was this bladder? A sound soon settled the question in the negative. The uterus could not be reached. I examined with the fingers of the left hand in the abdomen, and the fingers of the right hand in the vagina. The same hard mass could be felt, but the uterus could not be readily made out. I asked one of the medical gentlemen present to examine, and he said that he also felt a fibroid tumor. I then tapped the cyst, and after two hours of hard and anxious work managed to enucleate from its bed of dense adhesions an ovarian tumor about the size of a large orange. The adhesions to the uterus were so dense that I had to apply ligatures to several vessels about the left uterine cornu; and the rectal and bowel adhesions were in many places tied off in sections. An inner and an outer pedicle were formed, so as to avoid injury to the rectum and ureters.

The patient has done splendidly. I took out the stitches to-day. This case is now the second in which I have diagnosed fibroid tumor of the uterus after repeated examinations (and the use of the sound, to please those who pin their faith to it), and in which I have been unable to confirm my diagnosis by abdominal exploration.

Tait told me of a lady who consulted eminent men in Chicago, New York, Vienna, and London. They all told her that she was suffering from a uterine fibroid, but advised against operation. Her pain was annoying. She went to Tait. He told her that it might be a fibroid tumor, but it might not. She told him to go on and find out what it was. He did go on, and while I was with him removed a small dermoid cyst impacted in the pelvis. She went home delighted. The men who are "cock sure" in the pelvis are the ones who are most frequently wrong in their diagnosis.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE.

January meeting.

The president, Dr. Wm. E. Moseby, in the chair.

Dr. T. A. Ashby exhibited a specimen of dermoid cyst which he had recently removed from a single woman twenty-five years of age.

The cyst grew from the left ovary, and had been diagnosed as ovarian cyst. It measured 4½ by 5½ inches in its diameter. Its removal was accomplished without trouble, and the patient made a prompt recovery.

The interest in the case centred in the character of the cyst, and its contents. It was lined internally with a dermal tissue, and at one point the layer covered a small piece of bone. At this point a long twist of hair grew from the skin and measured thirty inches in length. The cyst contained a large collection of sebaceous and oily matter, and large strands of hair disconnected from the tumor and matted together in the cyst.

The specimen is an uncommon variety of dermoid cyst. A similar case has been reported by Dr. Munde, of New York. Dr. Ashby referred to the origin of dermoid tumors.

They are, no doubt, due to an irregular development of the epiblastic layer of the tissues of the fœtus in embryonic life. The cysts are almost uniformly found in organs and tissues which owe their origin to the layer of the epiblast, and this circumstance goes to explain the peculiar features which they present. The ovary is a very common location for them, and this fact would tend to prove that the organs of generation originate in the epiblast.

Dr. Wilmer Brinton read a paper on "Twin Pregnancy, Complicated by Placenta Previa Centralis."

I was summoned at 3:30 o'clock on the morning of September 1st, 1891, to see Mrs. B. T. M. Her second confinement, from her reckoning, would take place on October 15th.

I did not see her until sent for, as stated, on the morning of September 1st. Upon arriving at her home, I found my patient in bed, with the history of being awakened some time before I was sent for by having a few sharp pains, which were followed by a profuse hemorrhage.

Upon examining Mrs. M., I found the vagina filled with large clots of blood, the os slightly dilated and very soft, and a placenta presenting. At this time, her pains having ceased, I cleaned out the clots from the vagina, and found the bleeding had stopped.

I determined to return home, which I did, leaving orders for my patient to remain quiet, and to send for me at once if the pains or bleeding returned.

I was informed, before leaving the house, that a week previous the patient had had a severe hemorrhage, and, knowing I was out of the city, Dr. W. J. Jones, who lives in the immediate vicinity, was sent for. He saw her twice, and under the treatment and advice which he gave her the bleeding ceased.

At 6:30, or about three hours from the time I left the house, I was again sent for. I immediately responded, and I was soon joined, at my request, by my colleague, Dr. Crouch, and by Dr. J. H. Robinson.

A vaginal examination made at this time found the vagina filled with blood, which was continuing to flow. The os was more dilated and dilatable than it was at my previous examination, and a more complete examination found the placenta presenting, which was of the most complete central variety which I have ever seen. In running my finger around, I found the placenta was completely attached to the mucous membrane of the lower segment of the uterus, with the exception of a small space on the left side, from which the bleeding came, and in which a tear had taken place during the recent contractions, which had severed a small portion of the placenta from the attachments. My opinion being verified by the gentlemen present, and as the hemorrhage and pains were continuing, we determined to deliver at once. Chloroform was administered, and introducing my hand I found the cervix not well dilated, and had some trouble in introducing my hand. I tore rapidly through the placenta at the left side, and found a child presenting vertex. I ruptured the bag of water, and delivered it living by podalic version. In my efforts to do this, I was made conscious, for the first time, that the uterus contained a second child; so tying the cord of the first child, and handing it to Dr. Crouch, who was ably assisting me, I introduced my hand for the second time, and found the second child presenting shoulder — dorso-anterior position—the head being to the mother's left. I turned and immediately delivered a second living child, after which I introduced my hand into the uterus and removed the placenta, which presented a very ragged appearance from my efforts made in passing it at its attachment to the uterus on the left side. After removing the placenta, the vagina and the uterus were thoroughly washed out with warm water, during which I discovered the cervix was lacerated on both sides, due, no doubt, to my efforts to deliver the children through an imperfectly dilated cervix. Although a large amount of blood was lost during the operation procedures, the woman rallied well from the chloroform, the uterus contracted well, and within a few hours our patient presented no special traces of the severe ordeal which she had passed through. The children born, both males, presented the appearance of having advanced to the seven and a half months utero-gestation, and for two or three hours after birth did well, but later on in the day their extremities became cold, lips blue, heart weak, and they died some seven hours after their birth.

The mother did fairly well for a week, although

the pulse and temperature were somewhat above normal—the pulse averaging between 90 and 100, and the temperature about 100. She sat up on the eleventh day, and on the following day I was sent for, and found her with a high temperature and a rapid pulse, with some indication of phlegmasia alba dolens, and for three weeks she was under my constant care, with evidence of well-marked septic complications, and as soon as the tendency for phlebitis disappeared in one leg it appeared in the other.

I am satisfied the late septic complications occured from the lacerated cervix, which healed up kindly on the right side, but not so on the left, which healed slowly by granulations.

Upon my recall to the case on the eleventh day, I took charge of the vaginal injections myself. Previous to this time I had entrusted this to the nurse, much to my regret, for upon my first examination I was satisfied they had not been thoroughly given; so every day for several days I introduced a speculum, and with an ordinary piston syringe I washed out the uterus, the cervix, and the vagina with bichloride or carbolic acid sol., and dusted the seat of laceration with either boracic acid or iodoform. Internally was given quinine, phenacetine, large doses of iron, and good food.

The leg was bandaged from time to time with an ordinary roller bandage. Greatly to my relief, my patient finally recovered, and seven weeks after her confinement returned to her home in Washington.

My object in reporting this case is to impress on the minds of physicians the importance of not temporizing when they have to do with a case of placenta previa. There is no safety for the mother as long as she remains undelivered. I am satisfied no one can lay down dogmatic rules in every individual case, but my personal experience has taught me that in performing podalic version, and delivering either rapidly or slowly, as the case may indicate, you are working for the best interests of the mother and child in the vast majority of cases.

Dr. Wm. P. Chunn: I have seen only two cases of placenta previa. One I saw with Dr. Neal. The patient had been tamponed with cotton. He took out the cotton, inserted his left hand, and delivered the child by podalic version. Both mother and child did well. I had one patient of my own. It was a marginal implantation, and I thought I could use the forceps better than turn, and I did so. I had some difficulty in getting the forceps on, and failed at first; but the attending physician forced the head firmly down by external pressure, the forceps were put on, and the child delivered. I think I might have done better by podalic version.

Dr. Brinton: There is no absolute law for the treatment of placenta previa. In my first case the patient was lost by delay. In another case, the woman had bled considerably, but about the time I was called the head came down and the bleeding stopped. Forceps were put on and the child delivered. I am now satisfied that the first patient could have been saved by prompt action. In the ten cases of placenta previa which I have seen in practice, only two of the children have been saved. The mothers have all recovered with the one exception, as already specified.

Dr. T. A. Ashby: I think Dr. Brinton did the proper thing in this case. My experience with these cases has been limited, having seen but two. In one the child was dead born. The mother recovered. The placenta was attached over the entire cervix, and had to be torn away before the child could be delivered. In the second case I removed a dead fœtus of five or six months with placenta previa. She had been bleeding for some weeks. She recovered, and subsequently gave birth to a living child. More recently I delivered her of another dead fœtus.

With reference to the septic trouble which the doctor's patient had suffered from, I am satisfied that lacerated cervix is a prolific cause of pelvis troubles, and I frequently find laceration of the cervix and involvement of the tubes associated. The treatment that the doctor suggested, of going into the uterus and washing it out thoroughly, is very good. My own method is somewhat different. I put in a speculum, fill up the vagina with a bichloride solution, and then with some cotton on an applicator remove all the débris from the cavity of the uterus. I have treated eight cases in this way in the last year, and in each case got a good result.

I have seen but one case of pure septicemia that came on four weeks after confinement. There were no local lesions, and there was nothing in the uterus to be removed. The symptoms came on the twenty-first day after confinement, and she died in about a week.

Personal.

H. H. OLDRIGHT, M.B. Univ. Tor. '91, has returned from the West Coast of Africa, and has sailed from London for New Zealand, as surgeon of the "Duke of Sutherland" (3116 tons), one of the Ducal Line of steamships.

LORD KELVIN is the title which the newly-created medical peer, Sir William Thompson, will adopt. That is the name of a river that empties into the Clyde at Glasgow.

Therapeutic Notes.

DANDRUFF.—The following pomade is recommended in the treatment of dandruff:

R.—Acidi salicylici	- -	3ss.
Sodii boratis	- - -	gr. xv.
Bals. peruviani	- -	*m* xxiv.
Ol. anisi	- - -	*m* v.
Ol. bergamot	- - -	*m* xv.
Vaselini	- - -	℥ iij.

M. et ft. unguentum.

THE TREATMENT OF ASTHMA.—I divide cases into acute and chronic. In the *former*, marked by the most severe and urgent symptoms, I give carbonate of ammonia (5 grains), iodide of sodium (2 grains), tincture of belladonna (10 minims), and medium doses of aloës every hour or two. I also prescribe a ten-grain powder of antifebrin to be taken first. Asthma being, pathologically considered, a venous stasis in the bronchial tract, the ammonia, antifebrin, and sodic iodide flush the veins by their fibrin-solvent and liquefying action; the ammonia and belladonna stimulate the heart and dilate the peripheral capillaries; and the aloës act as a derivative of the blood-current toward the intestines and away from the bronchial tract. In the *chronic* form, marked by much less urgency, and generally accompanied by a degree of chronic bronchitis, I find astringent iron preparations, with full doses of belladonna, answer well.—*Satellite.*

NIGHT-TERRORS occur usually, but not invariably, in delicate neurotic children. The direct cause is usually undue stimulation of the brain, or of the imagination, by exciting stories, unkind treatment, a visit to the zoological gardens, or overpressure at school. By far the most common cause, the author believes, is constipation, often slight but persistent, the stools being hard and dry, and usually of light color. The error in the management of these cases is the use of sedative treatment, the constipation being neglected. The neurotic element alone being recognized, bromides are prescribed, often with good effect for the time. The cause being allowed to remain, the relief is in many cases temporary.—*Cheadle—Practitioner.*

ATROPINE IN LEAD COLIC.—Dr. F. Rowland Humphreys reports in *The Lancet* for November 21st, 1891, a number of cases of lead poisoning treated successfully with sulphate of atropine and iodide of potassium. The author concludes that in lead poisoning atropine in full doses (1) relieves the colic and the pain in the head in the most rapid manner; (2) it keeps the bowels freely open; (3) it assists in the return of the bodily powers; (4) it assists, directly or indirectly, in the removal of the lead by iodide of potassium.—*N. Y. Medical Record.*

SOLUTION OF THE FOUR CHLORIDES.—Formula of Dr. W. Goodell (*Am. Jour. Phar.*):

℞ Hydrarg. bichlor. corros. gr. j.
Liq. Arsenici chl. . . *m*xlviij.
Tinct. ferri chloridi
Acidi hydrochlorici dil. aa ℥iv.
Syrupus zingiberis q. s. ad, ℥iij.

M. Sig.—One-half to one teaspoonful in water after meals.

This preparation is being prescribed quite frequently, and several formulæ disagreeing with each other have been published. The above is an exact copy of the formula recently received direct from Dr. Goodell.—*Weekly Medical Review.*

INFLUENZA COLDS.—Few remedies are more reliable, and act better as a preventive, or lessen the distressing symptoms of an influenza cold, than the following mixture:

℞ Sodii salicylas . . . . . ℥ jss.
Liq. ammon. acet . . . . . ℥ ij.
Aq. camph. . . . . ad ℥ vj.

Misce. Capt.: ℥ss. omnis 3tiis horis.

If this be taken every two or three hours, when the first symptoms of cold come on, it will usually ward off the attack.—*British and Colonial Druggist.*

FOR sciatica, Dr. Starr ("*Nervous Diseases*") suggests:

℞ Tinct. colchici,
Tinct. cimicifugæ,
Tinct. aconiti,
Tinct. belladonnæ. aa *m*¾. M.

Sig.—One dose.

—*College and Clinical Record.*

SOLUTIONS of sublimate, heated to the temperature of 37·8° C. (100° F.) or over, have their antiseptic properties rendered more energetic by the elevation in temperature; thus a solution of 1 : 1000 will, under these conditions, possess a germicidal action equal to a cold solution of 1 : 500.—*Medical Age.*

QUININE cost $20.00 per ounce in 1823, and $3.00 in 1853; $3.70 in 1878; while now it costs from 18½ to 24 cents.

SALICYLIC ACID is said to cause a marked diminution in virile power.

Miscellaneous.

NEW MEDICAL WORKS.—Mr. Saunders, publisher, of Philadelphia, makes the following announcement: Important new medical works now in preparation, ready for delivery about June 1, 1892: (1) *An American Text-Book of Surgery*, by Professors Keen, White, Burnett, Conner, Dennis, Park, Nancrede, Pilcher, Senn, Shepherd, Stimson, Thomson, and Warren, forming one handsome royal octavo volume of about 1,200 pages (10 x 7 inches), profusely illustrated with wood-cuts in text and chromo-lithographic plates many of them engraved from original photographs and drawings furnished by the authors. Price—cloth, $7.00; sheep, $8.00. (2) *An American Text-Book of the Theory and Practice of Medicine, according to American Teachers*, edited by William Pepper, M.D., LL.D., provost of the University of Pennsylvania, to be completed in two handsome royal octavo volumes of about 1,000 pages each, with illustrations to elucidate the text wherever necessary. Price per volume—cloth, $5.00; sheep, $6.00; half Russia, $7.00.

TO PREVENT GROWTH OF FUNGUS IN SUGAR SOLUTIONS.—Mr. Leon C. Fink has carried out some experiments to determine exactly what proportion of salicylic acid is necessary to prevent growth of fungus in dilute aqueous solutions of sugar (*Bulletin of Pharmacy*). He finds that one-half grain of salicylic acid in each ounce of a one to three solution of sugar is an absolute safeguard against the formation of fungus, the liquid having remained perfectly clear and transparent after exposure for one year.—*Amer. Jour. of Med. Science.*

A SMART TRICK.—A Canadian medical student recently smuggled a skeleton into Canada from Detroit by dressing it up, properly padded, in woman's clothes, putting on it a hat and a thick blue veil, and seating it alongside of him in a buggy while crossing the ferry. After he had got it by the customs officers and into his own house, he learned that there was no duty on skeletons. His opinion of his own cleverness has fallen a degree or to.—*N. Y. Medical Record.*

A CHEAP DISINFECTANT.—Nitrate of lead is the cheapest disinfectant known that fulfils its intent. It does not, however, prevent putrefaction. The chloride of lead is much more effective in all directions. It is made by dissolving a small teaspoonful of the nitrate of lead in a pint of boiling water; then dissolving two teaspoons of common salt in eight quarts of water. When both are thoroughly dissolved, mix the two solutions. When the sediment has settled you have two gallons of clear fluid, which is a saturated solution of chloride of lead in water. A pound of nitrate of lead will make several barrels of the liquid, and costs from eighteen to twenty-five cents at retail.—*Annals of Hygiene.*

THE PAN-AMERICAN MEDICAL CONGRESS IN NEW YORK STATE.—At a meeting of the Medical Society of the State of New York at Albany, Feb. 5, a committee was appointed to co-operate in promoting the interests of the Pan-American Medical Congress. The committee consisted of Drs. A. Walter Suiter, A. Vander Veer, James D. Spencer, Seneca D. Powell, W. W. Potter, D. B. St. John Roosa, and John O. Roe.

SUICIDE AMONG PHYSICIANS.—The *Boston Medical and Surgical Journal* tells us that physicians not only headed the list of suicides last year, but that they have headed it every year in the last ten. This promises to be still more conspicuous this year, as in the first twelve days of January no less than seven physicians committed suicide in the United States.

PRIZE OF THE SOCIÉTÉ MÉDICALE DES HÔPITAUX.—The Hospitals Medical Society of Paris offers a prize of 1,000 francs ($200) for the best essay upon "Artificial Feeding of Infants." The competitive papers must be sent to the secretary of the society not later than July 1st, 1892.

COUNTERFEIT MUMMIES.—Seventeen mummies, recently purchased at a cost of $200,000 by the Berlin Museum, have been shown to be of recent manufacture and the handiwork of some wily Arabs of Alexandria.

A SCOTCH hospital is to be erected in Chicago as a memorial of Robert Burns.

THE

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ON FREE HEALTH REPORTS: AN ADDRESS TO THE MEDICAL PROFESSION OF CANADA.

BY EDWARD PLAYTER, M.D., OTTAWA.

Robert Farquharson, M.D., M.P., long a prominent member of the Parliament of Great Britain, at the late seventeenth annual congress of the Sanitary Association, of which he is president, said: "The foundation of all effective progress in preventive medicine must be education." Indeed it has now been found out in Great Britain that much greater progress can be made by educating the masses than by trying to coerce them.

In Canada, our Provincial Legislatures may enact laws and local boards of health may be organized by hundreds, and, although all this is a good beginning and essential, much more still remains to be done. Sanitary work is but begun when good laws are passed and local boards organized. These do not create the public realization of their usefulness. Health acts are now in advance of the public feelings. The people often, instead of welcoming them, take their enforcement as an intrusion and interference with individual rights and liberties. The masses of the people are not disposed to inconvenience themselves by keeping their body and premises clean and their infected family isolated to gratify the whim of their neighbors, or even their lawmakers. They require to be taught that compliance with health rules and regulations will be a direct benefit to themselves, yea, money in their own pockets; that non-compliance with such rules and regulations is the cause, indeed the only cause, of disease, with all its attendant pains, expenses, and loss of time; that wherever there is a high mortality or a high sickness rate, there surely will be found unsanitary conditions or environments which demand attention.

In this education of the people, although not at all akin to the education of the schools, it is very desirable that a spirit of emulation be stirred up, in order that the various districts or municipalities shall vie with each other in showing a low death rate and a "clean bill of health" by keeping themselves free from epidemic and other diseases.

It is and has long been the universal opinion of sanitarians, that the basis of all public health work and progress, both educational and coercive, is a system of health statistics—of births, marriages, and deaths. Beyond this it has become clear, in recent years, that for the best or even fair preventive progress statements or reports (not exactly statistics, for they cannot practically be complete or accurate), monthly or oftener, of prevailing diseases, especially of any outbreak or cases of infectious disease of importance, are absolutely essential. It will not do to wait for the death returns. Not only the local boards, but the central organization should be early informed of any such diseases.

Returns and records of these statistics and reports or statements of prevailing disease would form a most valuable record, year after year, for the Federal—the Canadian—Government to possess; but to be of practical value the information obtained from month to month, or oftener, especially of prevailing diseases, must be scattered freely amongst the people, at least monthly, as by means of a bulletin. These reports not only show where unsanitary conditions need attention, but they give rise to the desired spirit of emulation among the different municipalities. Every community then would have a strong tendency to endeavor to prevent, as far as possible, any outbreak of disease each in its own respective locality, and to preserve a "clean bill of health," as ships at sea usually desire to do, for their own credit.

Now it must be obvious to anybody, even if he be not versed in political economy, that it would be much more economical, on the whole, for but one centre in Canada, the Federal Government, to carry on this work of collecting statistics and reports, recording them, and issuing a bulletin of their condensed facts, etc., than for each province to do so on its own account, while the results in the former case would be incalculably better. If done by the one central government, all the information obtained would be in one central Canadian record, and, more important still, the information conveyed by the returns would then be distributed throughout all the provinces; done by each province, each would only collect and distribute within its own boundaries, except perhaps to a few outside officials, and the people of each would therefore only receive and obtain the information gathered within and relating to their own province; whereas it is almost as essential for the eastern or western provinces, for example, to learn in what special localities any epidemic or prevalency of disease exists in Ontario or Quebec as in their own provinces, while the same principle holds good with regard to Ontario and Quebec, in relation to the east and west. In short, if done by the one centre, all the provinces would get the good of all the information obtained; if done by each separate province, each would only get that relating to itself—a vast and most vital difference.

There appears to be a good deal of misapprehension amongst members of the profession relative to this question of federal and provincial public health legislation and action, arising apparently from want of time amongst the busy practitioners to consider thoroughly the whole question in all its bearings. Coercive legislation, enactments, by-laws, etc., and the carrying out of the same, must remain, as now, under provincial and municipal control. But any one who will give the subject due thought and consideration will surely see that the collection of the proposed statistics and reports and utilization of these for the public instruction and benefit, as above indicated, can be much more thoroughly, economically, and profitably done by one centre than by many, with vastly better results in every way. In agriculture, the one Central Experiment Farm can be utilized for the education of the farmers of the whole Dominion much better than for each province to sustain such a farm and attempt the instruction separately. Somewhat similar it is in relation to the analysis of food, etc., in the Dominion, and to the quarantines and diseases of animals. Moreover, it may be well to note here that, if we desire to make Canada as soon as we can the great country she is surely destined to become, while defending in a large measure provincial rights and privileges, we must, as far as possible, encourage a spirit of Canadianism, a unity and oneness, in all possible questions and subjects, and not manifest too much "provincialism."

As already in several of the provinces there is in a large measure provision for obtaining a record of births, marriages, and deaths, it has been well suggested that, at least for some time to come, each province may as well, in its own way, collect such statistics and then allow them on some terms to be utilized by the central department and dealt with for the public benefit in all the provinces; those provinces which have not now a system for this purpose being induced in some way to provide such.

It appears that it is now proposed to endeavor to obtain for the statistical department in Ottawa the information above indicated, from physicians in all parts of the Dominion, relating to the prevailing condition of the public health—*i.e.*, reports of any epidemic or cases of the most important diseases, by providing

the physicians with blanks for this purpose Doubtless the Government, any liberal government, would be quite willing to pay fairly for such reports if the people through their representatives in parliament were willing to vote the money for the purpose. Are the people willing? Many members of parliament, including at least one physician, say, decidedly, No; that if they were to vote for a sum requisite for such purpose they would be censured by their constituents. Then we can only, or must, first of all, educate the people up to a right appreciation of the importance and necessity for such information. They will then doubtless be willing to pay fairly for it.

Now this is largely, almost wholly, in the hands of the medical practitioners of Canada. What will they do in this behalf? It has been repeatedly said by a few of them that physicians now do too much without remuneration, more than their share, etc., and that the government, the people, *i.e.*, of course, should pay for all such information. This is very true; the people should pay; but as it is now they will not pay at present. Shall we not, then, endeavor not only to teach them the value of having it done for their own sakes, but also to be willing in course of time to pay for the same—teach them without pay, for a time? What else can be done?

Medicine, it may here be observed, is not a business, but a liberal profession, perhaps the most liberal of all the professions, once chiefly practised free by the priesthood. Is not the profession, and are not the members of it as a class, worthy and desirous that it shall ever remain thus liberal, free, noble, bounteous? The physician gives what cannot be weighed or measured and hence well estimated as to its money value. He must, however, get a livelihood for his family, and in this business age a certain amount of business energy is necessary. As the *New York Medical Record* (of Jan. 16th, 1892) says, "The physician's sympathy for the suffering, and his absorbing interest in the scientific aspects of his cases, raise his mind above financial considerations and cause him to forget that he is working for the support of himself and his family, as well as for the good of humanity. The physician has furthermore, as a rule, an inborn repugnance or incapacity for money-making pure and simple. He dislikes the financial relations and would gladly treat patients without a thought of fee, if he could be guaranteed an income to supply the needs of his family. Owing to this shrinking from even the appearance of being mercenary, he often hesitates to prosecute his just claims."

No one knows better than the writer how much has already been done by the medical profession in Canada in promoting and advancing the public health interests in the Dominion. It has always been foremost in this work, and, indeed, all sanitary progress is due to its efforts. Will physicians not now, "one and all," continue thus liberal and not allow the question of "pay" to influence them to the neglect of any public benefit or scientific proceeding?

Colton, it appears, long ago said, "Physicians are becoming too mercenary." But he wickedly added, "parsons too lazy, and lawyers too powerful."

Notwithstanding the influence which wealth now gives, there is that which wealth cannot purchase or procure. If the profession desires to retain its high position, or to push itself up to its proper place in society, as the first of all professions, the members of it must not approach the "mercenary," although they may properly and should place a high value on their services with all those who are able, and especially not unwilling, to make full return for the same.

When an effort is made, as it may be, to obtain a fair recorded return from the medical practitioners of Canada of the general condition of the public health, especially as relating to infectious or malarial diseases in their respective localities, hundreds will doubtless cheerfully respond to the calls of science and the public weal. Will they not all do so? Many earnest workers for the public good will hope so, and trust. When the work has been done for a time and the value of it has been manifested, proper representation of it to the Government and the people will doubtless bring the reward. The great majority of the masses of the people prefer to pay fair, full value for all or anything they receive from their fellow-men, although it may not be always easy to get them fully awak-

ened to an appreciation of the value of some services.

There are always a number of able "medical members" in the parliament of Canada who look to the interests of the profession, and the profession may be sure that so soon as the public will sanction a vote of money to remunerate physicians for such public service as making returns of sickness for the public good in the cause of the public health—such vote will be urged upon the Government by the medical members and asked for in the estimates by the Government. Cast our "bread upon the waters"; it will surely "return."

CONCERNING THE LOCAL ORIGIN OF DIPHTHERIA AND ITS LOCAL TREATMENT.

A REPLY,

BY R. SEIBERT, M.D.,

Professor of Diseases of Children, New York Polyclinic, and Visiting Physician to the New York Infant Asylum and the St. Francis Hospital.

In THE CANADIAN PRACTITIONER of Feb. 1st, 1892, Dr. J. S. Benson, of Chatham, N.B., has published an article entitled, "Is Diphtheria of Local Origin?" in which he addresses certain questions directly to me and cites my name and my method of submembranous local injections of chlorine water (*New York Med. Journal*, Dec. 6th, 1890) as an instance of the fact that "the practice and suggestions of many physicians are greatly at variance with the ideas they have put forth. For instance, Dr. Seibert, of New York, has invented an instrument (and a very ingenious one) for making submembranous injections, using chlorine water as the liquid. Now, what is the effect of this apparently simple operation? The fluid which is injected is at once carried away by the circulating blood and absorbents, and a puncture, representing the entrance of each of the half-dozen needles, remains. Is not each of these punctures a separate opening for infection?" And before this: "Do the disciples of the local origin theory advise the removal of *what they say is the cause of the disease, the exudation?*"

To begin with the last question first, I would here ask: Which disciple of the local origin theory of noteworthy reputation ever stated that the *exudation* was the cause of diphtheria? I know of no one. Lœffler, Klebs, and their disciples and their opponents in bacteriology, have some time since *all* agreed to the well-established scientific fact (which certainly needs of no more theoretical discussions) that true diphtheria is caused by the Lœffler bacilli (usually associated with streptococci) entering the mucous membrane of the pharynx and there causing that local inflammation known as diphtheria. Not even Dr. Seibert left any doubt as to his ideas on this subject, for in the above-mentioned article it is distinctly stated and put forth, as the first conclusion drawn from a rehearsal of the pathological anatomy of pharyngeal diphtheria, that "the *pseudo-membrane* is an exudate coagulated in the epithelium coming from the deeper layer of the mucous membrane, and therefore not the disease, but the result of it."

In criticising others, it is essential to be thoroughly informed as to what is to be criticised. If Dr. Seibert distinctly points out the fact that the exudation is the result and not the cause of the disease, then he certainly ought not to be held up in a critical article as saying the opposite!

The injected chlorine water is readily absorbed, according to our critic! Did he ever inject some and watch the effect? If not, he will again find some valuable information upon this subject in our above-mentioned article. Our experiments reported there show that the chlorine gas contained in the chlorine water immediately enters into chemical combination with the surrounding tissue-albumen, and only the pure distilled water is absorbed. This quick chemical action constitutes the great value of this water as a germicide, and for our purpose its non-poisonous action. As to the danger from infection Dr. Benson seems to see in the openings made by the needle-points, I would only remind him of the openings made in erysipelas, phlegmon, carbuncle, and abscess: the sooner and the more thoroughly the openings are made in these affections, the better the result. Why not be afraid of danger of infection here? Because experience has taught otherwise. But so it has with my diphtheria syringe.* Nothing like trying.

"What guard does Dr. Seibert leave in

* See my last report of 85 cases of pharyngeal diphtheria, treated by 11 different physicians, *Archives of Pediatrics*, Feb., 1892.

charge of the portals of circulation during the 6 or 7 hours' rest at night?" Why, of course, the corpses of the Lœffler bacilli lying about in the lower stratum of the exuding mucosa, as warning examples of the action of the injected chlorine water!

137 East Nineteenth St., New York.

Selections.

CASE OF IMPENDING FATAL COLLAPSE: IMMEDIATE RESUSCITATION BY TRANSFUSION OF SALT SOLUTION INTO THE PERITONEAL CAVITY.

The following case of some special interest is published by Dr. T. Johnson-Alloway in the *Montreal Medical Journal*. The patient, a married woman 42 years of age, was operated upon for ascites dependent upon malignant disease. After narrating the previous history of the case, Dr. Alloway proceeds as follows: "After she had been under preparatory treatment for about one week, I opened the abdomen. Three gallons of dark-brown, limpid fluid flowed out, and at the bottom of the pelvis I found two large hard bodies - the ovaries: they were non-adherent, nodular, and about the size and shape of a human kidney: they were stony hard to the feel, and attached by a short pedicle to the broad ligament. These ovaries were removed, catgut ligatures being used, and the pedicle of each dropped. On further examination of the abdominal contents, it was found that the mesenteric glands were much enlarged in certain clusters. The peritoneum was covered with secondary deposits about the size of crystal-like millet seeds. High up in the epigastrium was a large cluster of irregular masses located in the omentum, but which were not thought expedient to remove, ultimate good being very doubtful. The cavity was well cleansed and closed with silkworm gut sutures, leaving a drainage tube in the lower end of wound. The Trendelenburg posture was used, which doubtless tended greatly to prevent shock on the sudden escape of so large a quantity of fluid. When put to bed her condition was very good, the pulse being about 120 and full.

"All went well until about eight hours after the operation. I was then summoned by the nurse, who said the patient was pulseless and in a state of collapse. I found her in a very strange condition. There was not present that collapse we see from hemorrhage, but a restless, sighing, semi-incoherent condition. The radial pulse was a mere flicker, could not be counted, and the heart was evidently strained to its utmost to recover balance. I used hypodermics of brandy and also of ether with extract of digitalis, but no effect whatever was experienced on the heart during the half hour I awaited a change in the pulse; on the contrary, it was gradually becoming less perceptible at the wrist. The yawning and sighing became more frequent, she became very restless in the bed, the respiration, from being very shallow, became gasping, and, in short, she was rapidly passing into a dying condition. Recognizing the fact that this alarming condition was most probably due to the sudden withdrawal of so large a quantity of fluid (three gallons) from the abdominal cavity, and thereby removing firm and constant pressure from the heart and large abdominal vessels, the patient was in fact bleeding to death within her own vessels. The remedy was evident, and without another moment's loss of time I transfused about three quarts of sterilized salt solution (temperature 110°) into the abdominal cavity through the glass drainage tube fortunately inserted at the operation. When I had transfused this quantity she began to scream and vomit violently. I removed the tube and closed the opening by firm packs of cotton-wool. The strange, and, I may say, marvellous, result of this procedure now became apparent. The pulse at the wrist was beating full, strong, and counted 110 per minute. The time between the extreme state of collapse described and the taking of the pulse after the transfusion could not have been, at the outside, more than five or six minutes. I do not, therefore, think this remarkable change was brought about altogether by absorption of the salt solution, but in great part by the mechanical effect of pressure upon the vessels and heart, especially the latter, by lifting the diaphragm upwards. Also the activity of the absorptive power of the human peritoneum is well known, and is estimated at the rate of five to twelve pints per hour, or the

weight of the whole body in from twelve to twenty-four hours. If this estimate be correct, there must have been, in my case, a large quantity of the transfused fluid taken into the circulation in a very few minutes—enough, certainly, to turn the balance in the case of a rapidly failing heart. On the other hand, I do not think pressure of the fluid had all to do with the result, because on examining the abdomen some hours after the transfusion it was as flat and free from fluid as when the patient left the operating-room. Absorption here was complete, and an intense desire on the part of the blood vessels for fluid was evidenced by the rapid draining of the peritoneal cavity. The blood vessels were, however, satisfied with this supply, and the heart's beat did not average more than 115 during the following three and a half weeks she remained in my hospital. There was no effect on the temperature centres, as the highest temperature registered was 101.5°,* and that only on the second day; it then fell to normal and remained there.

"The result of peritoneal transfusion in this case has been exceedingly instructive to me, and I am sure will also be to others interested in these sad cases. Death from shock after exhaustive hemorrhage directly the patient leaves the operating table is by no means rare. We do not hear of all of them, because they are not reported, and we can therefore form only an approximate idea of the real mortality. Enemata of salt solution and hypodermic injections of the same have been tried with good results, but both of these methods are slow and limited in regard to the amount of solution which can be used in a given case. Peritoneal transfusion has not these disadvantages. The marvellous rapidity with which the fluid passes into the circulation will immediately resuscitate a failing heart, and places the patient from a dying to a living condition. In all cases where large tumors have been removed from the abdomen, the cavity should be filled with sterilized salt solution, and experience will show its great value during convalescence. I observed also that my patient did not suffer at all from the distressing thirst so noticeable after operations, and attributed so much to the effects of ether instead of to the blood-loss. It is certainly a strange way of giving a patient a drink, but, notwithstanding, it is equally as safe as the usual method, provided the solution is sterile and the operation has been strictly aseptic in technique."—*Montreal Medical Journal.*

* So-called "*fermentation fever.*"

NOTE ON THE USE OF THE CONSTANT ELECTRIC CURRENT IN THE TREATMENT OF INTESTINAL OCCLUSION.*

BY M. SEMMOLA, M.D.,

Professor of Therapeutics, and Director of the Therapeutical Clinic in the University of Naples; Senator of the Kingdom of Italy.

The clinical case which forms the subject of this note is very important, and perhaps unique, in medical literature, as demonstrating clearly (1) that there may be an intestinal occlusion due exclusively to transient intestinal paralysis through defective innervation: (2) that the constant electrical current has a truly marvellous effect in these cases.

The patient (C.S., of Secondigliano) was a young man æt. 20, of sound constitution, of normal osseous development, and in good general health, with the exception of a nervous temperament. He fell ill with severe stercoraceous colic, of which he was cured by ordinary treatment. After the colic he suffered from typhlitis and perityphlitis, but was completely cured by antiphlogistic treatment and milk diet. During convalescence he was attacked one day with diarrhœa, in consequence of some trivial error in diet. The day after the cessation of the diarrhœa he was attacked with most acute pain, with constipation, persistent vomiting, scantiness of urine, etc. The attacks of pain succeeded each other with great intensity every twenty to thirty minutes, and during these colicky attacks the intestinal coils were clearly visible all over the abdomen. The physicians in attendance instituted very active treatment—hypodermic injections of morphine, ice to the belly, hot hip-baths, poultices, calomel in large doses, etc. All these measures proved futile; the bowels remained locked, the pains continued very severe, the vomiting was obstinate and refractory to treatment, while the scanty secretion of urine was followed on the second day by

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association at Bournemouth.

complete retention, so that the catheter had to be employed two or three times a day. One of the doctors in attendance insisted on using enemata of olive oil, and first two and then three litres were thrown into the bowel. Nevertheless the condition of the patient became worse.

I was called into consultation on the third day, when—taking into account, first, the sudden onset of the pain; secondly, the paroxysmal character of the pain, and the freedom from suffering between the attacks when the abdomen was soft and pressure did not cause any pain; thirdly, the mapping out of the intestinal coils at different points during every attack of pain: fourthly, the intestinal occlusion which had come on suddenly after the patient had been repeatedly purged, and on the day following an attack of acute diarrhœa; fifthly, the existence of paralysis of the bladder, which had come on without any apparent cause so far as the genito-urinary apparatus was concerned, and which has never been recorded as a concomitant of ordinary intestinal occlusion: sixthly, the neurotic temperament of the patient—I distinctly expressed the opinion that the intestinal occlusion was due to nervous paralysis, and I urgently recommended the immediate application of the constant electric current. This advice was at once endorsed by the excellent practitioner in attendance, Dr. D'Auria, but the other medical men maintained that this measure was useless, and that it was necessary to perform laparotomy without delay. Dr. Vizioli, professor of electro-therapeutics in the University of Naples, was called in. The constant current which was employed was furnished by a Daniell's battery with Onimus' piles, modified as regards the graduation and the number of piles by Professor Vizioli. The intensity was measured by a milliampère galvanometer, the strength employed being 10 milliampères at every application. The positive pole was, by means of a rectal catheter, carried 20 to 25 centimetres up the bowel: and the negative pole, which was olivary in form, and covered with cloth steeped in a saturated solution of chloride of sodium, was rubbed transversely over the surface of the abdomen, especially in the parts corresponding to the cæcum, the ascending, transverse, and descending colon, and the sigmoid flexure, as well as over the hypogastric region. The duration of each application was from eight to ten minutes, and there were three sittings every day. By the end of the first day the retention ceased, the patient was able to pass water freely, his general condition improved, especially subjectively, and the attacks of pain were less violent, but the bowels were still constipated.

The surprising result of the treatment shown in the cure of the retention confirmed me in my own opinion of the nature of the case; and notwithstanding pressure constantly brought to bear in the opposite sense by the other doctors, who terrified the family with pictures of imaginary dangers because they were determined at all hazards to have laparotomy performed, the electrical applications were continued, and, after the ninth sitting, the patient had spontaneous motions of the bowels, and by degrees he completely recovered.—*British Medical Journal.*

AFFECTIONS OF THE THROAT IN CHILDREN are acute or chronic, but the former are most often seen, and can be subdivided into two classes, those accompanied with exudations, and those in which no appearance of any kind of *plaques* can be seen.

(*a*) *Tonsillitis with Exudations:* This class is the most important; the white matter may be pultaceous or diphtheritic. The pultaceous matter, composed of epithelial deposits, is easily removed by the tongue depressor or by a brush, and dissolves quickly in water, while the diphtheritic patch, on the contrary, is detached with difficulty, and, being of fibrous consistence, remains unaffected by water. To the former group belongs especially the sore throat witnessed at the outset of scarlet fever, herpetic tonsillitis, or ordinary pultaceous sore throat. The sore throat of scarlatina is characterized by its *début brusque* with high temperature, vomiting, pains in the back, and general malaise. The whole throat is of brilliant red, and spotted slightly on the next day or the day after the eruption appears. The herpetic sore throat is recognized by the presence of minute transparent vesicles covering the mucous membrane, and sometimes on the lips similar vesicles are discovered. The pultaceous sore throat can be recognized by the absence of the symptoms of herpes or scarlatina. Another form is that due to the presence of

aphthæ, but this is always preceded by stomatitis.

True Diphtheria: In this, the most serious form of inflammation of the throat, as every one knows, it is of paramount importance to make a microscopical examination. The *début* of the malady is generally insidious; the patient feels a sort of lassitude, but does not ask to remain in bed, becomes feverish at night, but seems better in the morning. However, when the physician examines the throat, he detects grey spots on the uvula and the pillars of the fauces. With a brush he tries to remove them, but he finds they are adherent, and then, if he is an intelligent practitioner, the gravest fears arise in his mind, which may be confirmed when he submits the exudation to the microscope.

(*b*) *Sore Throat without Exudation:* These forms are generally due to simple cold or irritation; they are to be met with in influenza, erysipelas, rheumatism, and certain eruptive fevers. Phlegmonous tonsillitis is another form, but is generally unilateral, and by the finger the pulsations of the swelling can be plainly felt. No error here can be easily made.—*Medical Press and Circular.*

CRANIECTOMY.—At the French Surgical Congress twenty-eight cases of craniectomy were reported, twenty-five by M. Lannelongue, and one each by MM. Th. Anger, Heurtaux, and Manoury (*Rev. Mens. d. Mal. de l'Enfrance*, May, 1891; *Br. Med. Jour.*). One of M. Lannelongue's patients died in forty-eight hours; the other twenty seven cases recovered from the operation. M. Lannelongue reports that in a large number of his cases there was distinct improvement both in intellectual capacity and in the power of walking. In M. Anger's case (a girl, aged eight years, imbecile, and with convulsive attacks from the age of eighteen months) there was great improvement. In M. Manoury's case (a microcephalic girl, aged four years, liable to convulsions from the age of three months, imbecile, unable to stand, and with athetosis of the upper limbs)there was improvement lasting two or three months, and then rapid retrogression. M. Heurtaux's patient, a girl, aged five months, died unbenefited. M. Lannelongue stated that he had performed two varieties of craniectomy, (1) linear craniectomy along the superior longitudinal sinus, posteriorly between the lateral sinus and the occipito-parietal suture, or transversely in the frontal bone dividing the longitudinal sinus; (2) *craniectomie à lambeaux*, in which the cranial bones were so cut as to leave bony flaps of various forms, the shapes being U-shaped, V-shaped, rectangular, horseshoe-shaped, or T-shaped. The amount of bone removed measured from ¼ to ⅓ inch. The average duration of the operation was about forty minutes. A trephine was applied at one extremity, and thereafter bone was removed with pincers. The dura mater should not be touched unless pachymeningitis were present, in which case it should be scarified or incised; it was not necessary to resect the periosteum. The operation of craniectomy was to be recommended in microcephalus with premature ossification of sutures and closure of fontanelles, in obstetrical paralysis or obvious cranial depression from other causes, in meningeal hemorrhages and hematoma, circumscribed pachymeningitis, hyperostosis due to congenital syphilis, and in hydrocephalus with thickening and premature closure of the cranium.—*Archives of Gynecology, Obstetrics, and Pediatrics.*

UNUNITED FRACTURES IN CHILDREN.—Mr. D'Arcy Power (*Lancet*) produced an analysis of sixty-three cases of ununited fracture occurring in the long bones of children. He introduced his paper by a short account of the work already done in this field. He showed that no one had yet been at the trouble to tabulate the various cases of ununited fracture which had been at different times recorded in medical literature. He believed that until the publication of the valuable paper upon this subject by Sir James Paget in his "Studies of Old Case-books," the occurrence of non-union in childbed had been almost wholly neglected. The conclusions arrived at by Sir James Paget were entirely borne out by the table which Mr. Power had collected. From a consideration of this table it appeared that cases of ununited fracture in children grouped themselves into three classes: the first in which the fracture was intra-uterine; the second, in young children (often as the result of very slight violence); and a third class embracing the greater number of the cases which occurred in older children and in the usual

manner. Of the thirty-six cases five were in the clavicle, nine in the humerus, eleven in the femur, and thirty-eight in the leg. It was very remarkable that the author had not met with any recorded case of ununited fracture in the forearm, although numerically the statistics of fractures showed that the radius and ulna were more frequently broken than any other in a child's body. As regarded the sex, non-union occurred in twenty-five males and in thirty-five females; in three cases the sex was not mentioned. So few observers had noted the side upon which the bone was broken that the table was worthless to settle this point; but there seemed to be a general impression that non-union was much more frequent upon the left than upon the right side. At any rate, the point was worth noting for future observation. The results of the treatment of non-union were most unsatisfactory. Out of the sixty-three cases bony union was obtained in six cases, in seven the patient was relieved, but in thirty-six cases the patient remained *in statu quo ante*. The author believed that ununited fractures were becoming more frequent than they formerly were, and he endeavored to account for this fact. He also pointed out how extremely rare non-union was in France, not in children only, but in adults of both sexes.—*Archives of Gynecology, Obstetrics, and Pediatrics.*

GONORRHŒA IN WOMEN.—The more exact studies of the present have expanded very greatly our knowledge of gonorrhœa in women (*Med. and Surg. Rep.*). It is but a little while since this disease in women was considered as trivial; as being only a vulvo-vaginitis which would recover, even without treatment, in six weeks; and as meriting attention, not so much because of the evil it might do the woman, as because of the possibility of the disease being conveyed to men. Enlarged experience has shown this conception of the affection to be not only adequate, but even partly erroneous. The error is with reference to the usual seat, which has been shown to be the cervix uteri and not the vagina. It is now well established also that, far from the disease terminating spontaneously, it tends to persist in a chronic form for a very long time—almost indefinitely. The disease tends to invade the entire genital tract. Not only the vulvo-vaginal glands, but the endometrium, tubes, ovaries, and the peritoneum—even distant organs and tissues, as the knee or ligaments of the spine, may be affected. Thus, incurable or even fatal conditions may and frequently do arise from this disease, heretofore considered so trivial; not to consider the extension of the disease to the urinary organs, where it may produce the same serious conditions which it does in men.—*Archives of Gynecology.*

EUPHORIN IN GYNÆCOLOGICAL PRACTICE.—L. M. Bossi (*Rif. Med.*, December 15th, 1891) reports the results of some clinical experiments with euphorin made by him in obstetric and gynæcological cases. He employed it in powder in twenty cases of ruptured perineum, and found that it promoted rapid healing both in slight cases and in more severe lacerations where sutures had been required. He also used it as a dressing to the stump of the umbilical cord in twenty-one new-born babes. In no case did suppuration take place, nor was there any sign of the drug having been absorbed. In none of the cases was there any appearance of icterus neonatorum. In twenty-nine gynæcological cases euphorin was employed as a fine powder, applied by means of a special atomiser (vaginitis, ulcerations of the os, cervicitis with abrasions of the portio vaginalis and parenchymatous cervico-metritis) or small pessaries about 4 centimetres in length and containing 40 to 50 per cent. of euphorin, which were introduced every two or three days into the uterine cavity (in cases of acute and chronic endometritis). In both these classes of cases the results of the treatment were satisfactory and Bossi concludes by saying that his experience leads him to think that euphorin acts both more efficaciously and more rapidly than any other substance hitherto in use, not excepting iodoform. —*Brit. Med. Jour.*

MEDICAL TREATMENT OF PERITYPHLITIS.—The view, which appears to be gradually gaining ground, more especially among surgeons, that once inflammation of the appendix cæci has been diagnosticated these cases should be handed over for surgical treatment, has induced Dr. Saundby, of Birmingham, to put on record

fifteen cases of appendicitis which have been under his care during the past six years. Among these fifteen cases there was only one death—the only case treated surgically—and the *post mortem* appearances led the writer to believe that life might have been spared had he adhered to purely medical treatment. 86.6 per cent. were cured, and 6.6 per cent. relieved. The average length of treatment is admittedly long, and a more rapid cure by surgical means might be claimed, though the writer is of opinion that a little time may fairly be sacrificed in view of the inevitable risks of surgical interference. The plan of treatment he adopts is rest, free evacuation of the bowels, hot fomentations or the ice-bag, with the addition, in chronic cases, of repeated blistering over the tumor. He strongly supports the method of treatment by the administration of full doses of sulphate of magnesium which was advocated by a recent American writer, Dr. W. T. Dodge.—*Birmingham Med. Review.*

TWO METHODS.—To a physician of Philadelphia, widely known and greatly honored, an enterprising firm of dealers in wine lately sent a most lavish and costly case of "samples" of their "medicinal" beverages. The enterprising firm was thanked, and politely informed that the present had been re-presented to —— Hospital. Another physician writes an effusive and laudatory letter in praise of the wine, as regards its prophylactic and curative properties in disease, and this letter will doubtless be poked under the nose of every one of us for years to come. In certifying to the superior excellences of one special preparation, it goes without saying that as a scientific man the physician has made impartial scientific analysis and tests of all competing preparations of the kind, and chemically, physiologically, and therapeutically is disinterestedly certain that the one he pronounces the best is really so. If he has not done so his certificate is a farce, and he has unjustly discriminated against other preparations, possibly equally as good, the makers of which trust to the qualities of the preparations rather than to sly advertising dodges. But, whatever the fact, either he has been foolish enough to give a valuable thing for nothing, or he has had value received for the puff.—*Medical News.*

THE SURGICAL TREATMENT OF TUBERCULOUS CERVICAL GLANDS.—Edmund Owen, in the *Practitioner*, discusses the advisability and methods of operating in these cases. Radical procedures are advocated. The use of iodine and poultices is unsatisfactory, and sulphide of calcium is nothing but an impostor. If the glands are allowed to break down, the neighboring ones become infected. The scar left by operation is less than that left by nature. If suppuration has occurred, opening and curreting should be performed. Chloroform is advised to be used as the anæsthetic; and although he has never had a death from it, still two cases came near succumbing. He says in the human species the pulse is terribly apt to fail before the respiration. In these operations it is the internal jugular vein that causes anxiety; it is often laid bare. In one case it was injured so close to the skull as to require a hæmostatic forceps to be left *in situ* for two day. In some cases it is wise to drain with a small tube or horsehair. The stitches should be removed within forty-eight hours to avoid scarring. Concerning the results, a second operation has in no instance failed to secure the desired end. —*University Medical Magazine.*

ICHTHYOL IN TUBO-OVARIAN DISEASE.—At a meeting of the Turin Academy of Medicine, on June 12, Dr. Albertoletti reported (*Riformo Medica*) the results of an extended trial of ichthyol made by him in the Maria Victoria Hospital on a number of women suffering from salpingo-ovaritis, endo-, peri-, and para-metritis, etc. He used almost exclusively the sulpho-ichthyolate of ammonium, which he gave internally in pills, or by injection in the form of pomade, or by intra-uterine injection. He sums up the results obtained as follows: Resolution in the relative short space of time of endometritis in cases which had proved refractory to the most active treatment; absorption (not always complete, however) of peri- and para-metritic exudations; cessation of pain in every case without exception. The remedy, according to Dr. Albertoletti, has this marked advantage over other remedies, that while at least equally efficacious, it is perfectly well borne in all cases, and can therefore be used when other forms of medication are inadmis-

sible. Dr. Bergesio, in discussing the paper, confirmed Dr. Albertoletti's conclusions in every particular, and said that ichthyol seemed destined to solve many therapeutic problems relative to utero-ovarian disease.—*Archi. Gyn., Obs. and Ped.*

"L'ESTOMAC ET LE CORSET."—Dr. Chapotot, in a recent essay published by Baillière under this title, gives a fair summary of the opinions of experts such as Bouvier, Dickinson, Sibson, and others, on the real and imaginary evils attributed to the constriction of the waist. The question of the true position of the stomach is very important in respect to the correct interpretation of abnormal relations of the abdominal viscera detected after death. The most original portion of Dr. Chapotot's essay refers to a matter of some interest to ladies. Young women have often reason to complain of disagreeable noises caused by air moving about in the epigastric region. Our author attributes these noises, which differ from borborygmi, to a vertical bilobulation of the stomach caused by the pressure of stays. During expiration the upper lobe is relieved of pressure by the ascent of the diaphragm. The lower lobe is, on the other hand, subjected to great pressure from the abdominal muscles. Hence, air and liquids are forced upwards into the upper lobe through the narrow isthmus produced by the pressure of the stays; as they pass through the isthmus and issue out of it, the characteristic gurgling sound is produced. If the stays be taken off the sounds are no longer heard, but they may be reproduced by applying any other form of restriction to the abdomen at the same level.—*Brit. Med. Jour.*

THE DIGESTIBILITY OF CHEESE.—It is the general opinion of the laity that the eating of cheese after taking food is an assistance to digestion. This view seems not to be in accord with the result of experiments made by von Klenze, as recorded in the *Allgemeine medicinische Central-Zeitung*, No. 18, 1891. He made very thorough tests of the various forms of cheese found in the dietary lists. For the experiments he used an artificial digestive fluid, to which were added 50 c. c. of fresh gastric juice and 3 c. c. of hydrochloric acid. Into this he placed a gramme of the cheese to be examined. Eighteen varieties were tested, and the following deductions made: Chester and Roquefort cheese took four hours to digest; genuine Emmenthaler, Gorgonzoler, and Neufchatel, eight hours; Romadour, nine hours; and Kottenberger, Brie, Swiss, and the remaining varieties, ten hours. Considering that in a healthy stomach digestion after an ordinary meal is complete in from four to five hours, it would seem from von Klenze's studies, that Chester and Roquefort cheese were the only kinds that were likely to be digested within this length of time, and that the other varieties, some of which are largely in use, not only did not assist digestion, but actually retarded it. —*N. Y. Medical Journal.*

AN UNUSUAL INTESTINAL CONCRETION.—A case of a large concretion having become lodged in the cæcum has just been recorded by a French practitioner. The patient, a woman, had for a long time suffered from chronic intestinal catarrh, and after death the cæcum was found to be occupied with a large greyish mass, which readily broke down under pressure. On further examination the mass was found to consist of eighty-five per cent. of sub-nitrate of bismuth, together with fifteen per cent. of organic matter. The presence of the bismuth salt was easily explained by the fact that the patient had for a long time before her death been accustomed to take large quantities of it. —*Medical Press.*

STRASMANN, experimenting on three men, found that the quantity of alcohol excreted unchanged from the lungs amounted to from 5 to 6 per cent. of the quantity ingested, and that the quantity passed off in a similar way from the kidney was from 0.73 to 2.43 per cent. According to these experiments, 90 per cent. of alcohol is consumed in the system. These experiments are decisive only as regards the use of alcohol in small doses and as a remedial agent. The question of the use of alcohol, as a daily article of diet by the healthy is not affected.

A NEW medical college for women is to be established in St. Paul, Minn.

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TORONTO, MARCH 16, 1892.

MEDICAL EDUCATION IN ONTARIO.

We publish in this issue the open letter of the distinguished president of the University, Sir Daniel Wilson, to the Minister of Education for Ontario in reference to medical education in this province. The letter is intended as a reply to a marvellous production of one who is allowed to remain in the anomalous position of Dean to a respectable medical college. When one considers the *personnel* of the Senate of the University of Toronto, including such men as Chancellor Blake, Vice-Chancellor Mulock, President Sir Daniel Wilson, Rev. Dr. Caven, Rev. Dr. Sheraton, Rev. Dr. Burwash, Rev. John Teefy, Rev. Dr. Dewart, Sir Casimir Gzowski, Chancellor Boyd, George Gooderham, George Cox, and many others who are considered law-abiding citizens, he can scarcely avoid a feeling of surprise when these men are openly charged with dishonest misappropriation of public moneys. The ordinary onlooker, after reading Sir Daniel's reply to this monstrous accusation, might possibly doubt the wisdom, even from the worldly serpent point of view, of such "reckless" statements.

We borrow the word "reckless" from Sir Daniel, whose chaste and classic English in this connection is perhaps more becoming than the old-fashioned, blunt Anglo-Saxon methods of characterizing such conduct. We regret exceedingly that the Dean, who has done so much for medical education in Ontario for many long years, should now endeavor to destroy a sister institution, whose authorities treated him with marked courtesy in 1887, when the new faculty was restored to the University of Toronto. His intimate friends will probably join us in regretting that the methods he has recently adopted have passed the bounds of decency, and are likely to recoil on him and his colleagues, who have allowed themselves to be dragged through the mire by their energetic, though erratic, chief.

We will not now attempt to discuss the various subjects treated in Sir Daniel's admirable letter. It will be read with interest and delight by all unprejudiced persons who take any interest in scientific medical education. It must be a source of satisfaction to the members of the Medical Faculty to have gained the warm sympathy and all-powerful assistance of such a distinguished body of men as the Chancellor, Vice-Chancellor, President, and the other members of the Senate. If, under such circumstances, they failed to make the faculty a pronounced success, they would get but little sympathy from the profession in this province.

TORONTO GENERAL HOSPITAL.

The annual report of the Toronto General Hospital, which has just been published, contains much that is interesting both to the profession and the public. The first building for hospital purposes in Toronto was erected on the block bounded by King, John, Peter, and Adelaide streets, at a cost of $15,000. The present site was selected in 1854, when the central building was erected. For many years it had a serious struggle for existence, and in August, 1868, the trustees were compelled to close it on account of lack of funds. It remained closed for about a year, and on the expiration of that time was reopened under a new directorate.

The board of management received valuable assistance from various sources, and were very judicious and careful in their methods. As a consequence the hospital has flourished, and additions have been built from time to time which have greatly increased the facilities for treating all kinds of diseases and injuries. We are inclined to think that many practitioners of the province are not aware of the fact that this institution is without doubt the largest and best ordered hospital in Canada.

The total number of beds now in commission is 365. This includes those of the new pavilion,

which number 39. This pavilion is intended exclusively for women suffering from diseases and tumors of the abdomen and pelvis; and, although unpretentious in appearance, is admirably adapted for the purposes for which it was intended.

We believe this is Dr. O'Reilly's first attempt to publish a complete and elaborate report, but hope it will not be the last. Not the least interesting portion of the report is that which refers to the "Training School for Nurses," which was established in 1881. The enthusiasm and zeal of the superintendent, Miss Mary A. Snively, are well known and duly appreciated by all who take any interest in the school. The applications for admission are large, and great care is observed in selecting the proper ones to be placed on the list of probationers. The course given is a thorough one, the teaching being done chiefly by Miss Snively, who, however, gets valuable assistance from members of the active staff, who are glad to assist in the good work that is being done.

MEDICAL EDUCATION IN ONTARIO.

A LETTER TO THE HON. G. W. ROSS, LL.D.,
MINISTER OF EDUCATION,

BY SIR DANIEL WILSON, LL.D., F.R.S.E.,
PRESIDENT OF THE UNIVERSITY OF TORONTO.

In accordance with your request, I have perused the open letter addressed by Dr. Geikie to the Honorable Attorney-General on the subject of "Medical Education in Ontario." In reply, I must invite your attention to the broader questions which it involves.

In the remodelling of King's College, whereby the provincial endowments for higher education were transferred from the control of a single denomination and placed on the just basis of a national system in which all citizens enjoy perfect equality, the Faculties of Law and Medicine were abolished. This revolution had already been effected when I entered on my duties as a professor in 1853; but the incidents connected with it were fresh in the memory of all, and the chief actors were prominent members of the community. I had the privilege of enjoying intimate intercourse with the Honorable Robert Baldwin, and was admitted to much friendly communication with the Honorable Chancellor Blake, and with other public men conversant with the political life of the time. From the information communicated to me by them, I was left in no doubt that the abolition of the Medical Faculty was largely due to the antagonism between the late Dr. Rolph and certain professional rivals; the Honorable Dr. Rolph being, at the time of its abolition, a member of the Government. I was subsequently confirmed in my belief of the influence so exercised by approaches made to me from the same quarter with a view to the restoration of the Medical Faculty.

Fresh as I then was from Edinburgh, and familiar with the relations of the science departments to other branches of instruction in that university, I was strongly impressed with the beneficial influence which an efficient Medical Faculty exerts in the stimulating and fostering of all departments of science. It was, therefore, with mingled surprise and regret that I learned of the abolition of the Medical Faculty at the very time that steps were being taken to establish professorships in Science, and give to it some due share in the prescribed requirements of a liberal education. The results abundantly confirmed my apprehensions. The department of Natural History exercised slight influence on the studies of the undergraduates; and the entire scientific work played a very subordinate part in undergraduate studies.

The counter-revolution which the restoration of the Medical Faculty effected is already abundantly apparent. The department of Natural History has expanded into an efficient school of Biology, with its related branches of Physiology, Histology, and Botany, offering to the students in Arts ample facilities, and holding out strong incentives to a thorough devotion to their study. The department of Chemistry has, in like manner, entirely outgrown the limited aims of earlier years; and the needful steps are being taken for providing an adequate building, with the appliances for carrying on laboratory and other work, not less important to many of the students in Arts than to those in the Faculty of Medicine. The necessity for similar provisions for the department of Geology is now urgently pressed on the attention of University authorities; and action is only delayed till funds are available for the purpose.

The importance of Chemistry to the medical student is universally recognized. The novel bearings of Biology, in all its branches of research, on the transformation of the practice of medicine from empirical routine to an intelligent scientific application of well-determined remedial measures to specific diseases are now widely familiar. But even Geology has its branch of Palæontology to which the attention of the medical student is wisely directed; Psychology, though mainly prosecuted as a branch of philosophy, has its important bearings on abnormal cerebral action, on hypnotism, and many forms of mental aberration; while Physics has now its special experimental lectures, including the study of electricity and magnetism, to meet the requirements of the extended medical curriculum. In all this, instead of the work of Arts students being impeded, the necessary development of the various science departments has largely added to the facilities for their study.

In this healthful expansion every true friend of higher education in Ontario has an interest; and no class of students enjoy such important practical results as those in Arts: the science teachers in your Collegiate Institutes and High Schools; the land surveyors, mining engineers, the chemical analysts, and druggists; the electricians, and all to whom practical scientific training is of value. Yet all this Dr. Geikie calls upon you to reduce to the restricted and inadequate scale of earlier years, assumed to comprehend a sufficiency for students in Arts, on the plea that "it is not the duty of the state to use public funds of any kind in educating students for a special profession any more than for any other calling by which people earn their living." What, then, are we to think of our Provincial Agricultural College for the scientific education of farmers; or our Normal Schools and School of Pedagogy for teachers; or our School of Practical Science for land surveyors, civil engineers, chemical analysts, architects, etc.; or a subsidized School of the Fine Arts; or a Canadian Literary Institute? Is all special professional training, with the one exception of medicine, deserving of aid and encouragement from the state; or is it not rather beyond all controversy that there is no other department of professional training—not even that of the teacher—in which every member of the community has so keen a personal interest as that of medicine? I will only say, in the words of Dr. Geikie, "Our province is inhabited by sensible people, who can see and judge of such matters for themselves."

Dr. Geikie next proceeds to advance charges of gross abuse and shameful misappropriation of University funds.

(1) The Legislature having voted $160,000 in aid of the restoration of the University buildings after the disastrous fire of February 14th, 1890, Dr. Geikie says: "It may appear incredible, but it is nevertheless true, that at this very time, or almost immediately afterwards, other extensive and very costly buildings were contracted for and pushed as rapidly forward as possible. . . . . Most unquestionably, the Legislature of Ontario, which had hastened to vote $160,000 to aid in repairing the damage done by the fire, had no idea that the most of the sum so promptly and liberally voted would be at once spent in a way which was never for a moment intended, namely, on dissecting rooms," etc.

It is scarcely possible to characterize in too strong language the reckless conduct of a person in Dr. Geikie's position making to the Attorney-General a charge against the authorities of the University which he admits to be, to all appearance, incredible, and yet which he obviously never troubled himself to authenticate while pledging his word for its truth. The facts, which he might have readily ascertained on enquiry, are these: The plans for the extension of the Biological building were completed in November of the year previous to the fire; the contracts for the building were accepted, and the requisite funds appropriated by the Board of Trustees immediately thereafter, and the building was already in progress and the foundations well advanced before the fire occurred. It is scarcely necessary, therefore, to add that not a single dollar of the money voted by the Legislature has been spent for this or any other purpose than the restoration of the buildings destroyed by the fire.

(2) Again, Dr. Geikie asserts that the Biological buildings of the University are really an addition for the accommodation of the Medical

Faculty; that their extension "was manifestly intended for medical teaching purposes"; and that "they are, to all intents and purposes, medical school buildings." To this I shall offer no vague reply, but a definite statement of facts. In the east wing, first completed, there are, according to the architect's report, about 16,000 square feet of floor space. Of this fully 12,000 square feet, or three-fourths of the whole building, are entirely devoted to the use and purposes of the students in Arts. The lecture-room and the elementary laboratory, which are the only rooms that the medical students share with those of the faculty of Arts, have an area of about 4,000 square feet. But both lecture-room and laboratory would require to be of the present dimensions if the Medical Faculty were abolished. Of the thirty-eight working places in the elementary laboratory, nearly all are occupied every day by the first and second years' practical classes of the Arts Faculty, each class numbering over thirty students. The same places are used at other hours for the practical classes in Biology and Histology of the medical curriculum; but the latter classes are under the charge of instructors paid exclusively from the resources of the medical students' fees. I cannot imagine that any disinterested and impartial inquirer will see the slightest impropriety in the facilities provided by the University for its Arts students being also made available, within such restrictions, to the students in its Medical Faculty.

(3) Next, turning to the later extension of the Biological building, which Dr. Geikie affirms to have been erected from funds obtained on false pretenses, and to be, "to all intents and purposes, medical school buildings," the simple fact is that the transfer of the teaching of Natural History or Biology, in all its branches, to the new building, which for the first time supplied needful appliances in other respects, rendered the removal of the Museum to the same building imperative. The addition of this as part of the original plan was contemplated from the first, and would have been no less indispensable had no Medical Faculty existed. So far, then, from the later extension of the building being purely for medical purposes, the whole main southern range was originally designed and is now appropriated for the accommodation of the Museum. Had it been possible to complete the entire building at once, the whole contents of the Museum would have been safely disposed in their new apartments before the calamitous fire of 1890. But although serious damage was then done to the collection, much of the valuable contents were rescued; and with the gifts already received from many liberal benefactors, in addition to further promise of valuable contributions, it is confidently anticipated that the new Biological Museum, rearranged on the plan now in vogue in the great German universities, will not only be one of the most important educational museums on this continent, and therefore alike helpful to Arts and Medical students, but that it will also prove a popular and attractive feature of the Provincial University for the general public.

So far, therefore, it is obvious that one main portion of the newer building was designed and is appropriated for other than medical purposes. In a further portion of it temporary accommodation has been provided for the departments Geology and Mineralogy until a more adequate structure can be erected; and in so far as certain portions of the building are set apart for the Medical Faculty, a report was obtained from the architect specifying their estimated cost, and on the basis thus furnished an annual rent of $1,200 is charged to the Medical Faculty, in accordance with the report of a joint committee of the Board of Trustees and the Senate as what, in their estimation, "would be a just and adequate allowance" as interest for the cost of erection. In addition to this, the University is credited with a further sum, estimated at $1,000, to accrue to it as "proportion of expenses of the maintenance and repairs of Biological and Chemical buildings, to be refunded out of the Medical Faculty funds." With those facts before you, I leave you to form your own estimate of the value to be attached to Dr. Geikie's statement of what even he acknowledges to "appear incredible," but which he gives you his solemn assurance "is nevertheless true!" I observe that the letter is signed by its author in his official capacity as "Dean of Trinity Medical College," and that he professes to speak in the name of the Faculty. "To the Government and to the Legislature,"

he says, "we continue to look for redress." Although I have only now obtained sight of the letter, on its being forwarded by you to me with a request for a reply to its grave charges, including that of fraudulent misappropriation of public funds obtained on false pretences: yet I observe by the date that the letter has been in circulation unchallenged for upwards of two months. Can it be possible that the respectable body of medical gentlemen constituting the Faculty of Trinity College are willing to share the responsibility of such reckless and unfounded assertions as I have quoted from the letter addressed by their Dean to the Attorney-General?

One further point remains to be noted. Under a University statute, confirmed by the Lieutenant-Governor in Council, all fees paid by medical students are apportioned to the Medical Faculty. In the interpretation of this statute, fees paid by students for Physiology, Chemistry, and Biology have been treated as "fees paid by medical students," and this Dr. Geikie denounces as "an abuse worthy of Ottawa!" In reality, out of this fund, derived entirely from fees paid by the students in the Medical Faculty, the following expenses are met, namely, the instruction in practical chemistry for medical students in their first year; the special medical chemistry for students of the second year; the zoology for those of the first year, and the histology for those of the second year; all this being instruction specially designed and adapted for medical students. On the other hand, the medical fund has not hitherto been charged with any payment for the medical students who avail themselves of the didactic lectures in physiology, nor for such lectures in chemistry—apart from laboratory work—as they share in common with Arts students; as these lectures involve no more than the occupation by the medical student of a seat in the lecture-room, and lead to no addition to the cost which the University would have to incur for the students in Arts if no Medical Faculty were in existence. Again, out of the same medical fund, derived exclusively from the fees of the medical students, such charges are met as those incurred in the purchase of microscopes and other instruments for scientific research, and for furthering the experimental basis of pharmacology and therapeutics. The restoration of the Medical Faculty has largely increased the amount of work devolving on the science professors, but none of the fees accrue to themselves in remuneration for the great addition to their labor and responsibilities. It is the source on which they draw for the purpose of extending and elevating the teaching of medical science. For example, on the recommendation of the Medical Faculty, the Senate has approved of the appropriation out of their fund of $1,000 to defray the expense of a practical course of bacteriology to be given the current year by Professor Ramsay Wright after his ordinary duties are over. This course of post-graduate instruction in one of the most important branches of medical science will occupy the greater part of each day throughout the month devoted to it, and will be available to all members of the medical profession. The appropriation above named is required solely for needful appliances for the course. The services of the professor are voluntarily given without remuneration.

That some readjustment of some of the arrangements heretofore adopted in reference to the special medical fund may commend itself to your judgment, under the present circumstances, is possible. But the devotion of the fees paid by medical students for instruments and other appliances indispensable for the furthering of scientific research in its special application to medicine; or for such courses of lectures as those of the Professor of Biology—though his salary is derived solely from the University endowment, and not from the medical fund—to form the requisite means for such post-graduate work as I have described, can scarcely suggest to any unbiased mind the idea of a misappropriation of University revenue.

It is inevitable when any great public improvement on existing systems is inaugurated that the old Ephesian cry of "Our craft is in danger!" should anew be heard. The old profitable venture is not only claimed to be a vested interest, but is unblushingly maintained to be ample for all requirements; if not, indeed, incapable of improvement! Dr. Geikie repeatedly refers to "our self-supporting medical colleges," confidently affirms that they satisfy all requirements of medical edu-

cation; and as he takes upon himself to say, "as is abundantly proved, do the work as well as it can be done!"—"provide and equip every building they require at their own cost, which answer perfectly all the purposes of the highest and best medical education given in any part of the empire!" I accept these and similar statements of Dr. Geikie as made in good faith. Marvellous as they are, I assume that he believes them all. But if so, they show how little conception the Dean of Trinity College has of the requirements of a well-equipped medical school. I have repeatedly had letters from old students who, after beginning their medical studies at one or other of the Toronto medical schools, have gone to one of the great schools of Europe; and their expressions relative to the contrast between the inadequate and petty provisions in the little building alongside of our Toronto General Hospital and the ample appliances they found available for them at Edinburgh, London, Paris, or Berlin, would furnish an amusing commentary on Dr. Geikie's self-complacent estimate of his school. Why, sir, the Edinburgh Hospital, with its clinical lecture-rooms, operating theaters, etc., covers a larger area than many Canadian villages; and alongside of it stands the amply equipped university buildings devoted to the departments of science and medicine, including biology, physiology, and all the branches of science which now contribute so largely to the transformation of medicine into scientific instead of mere empirical treatment of disease.

In truth, the great evil of the multiplication of such "self-supporting" medical schools is that their pecuniary interests are in conflict with the necessary expansion to embrace the important new applications of modern science. Dr. Geikie speaks of the University of Toronto as a keen competitor with such schools for students; but the entire record of the University in its efforts to set a higher standard for its medical degrees proves that it voluntarily adopted and adhered to requirements which greatly reduced the number of candidates willing to encounter the severe conditions it imposed. At the late meeting of the College of Physicians and Surgeons of Ontario, Dr. Bergin, as convener, presented the report of a committee appointed the previous year "to communicate with the authorities of the Canadian and English universities and medical colleges, and obtain their views as to the necessity, if any, for a higher standard of preliminary and medical education." Important changes, based upon this report, were sought to be introduced into the curriculum; and on the persistent urgency of Dr. Geikie and others to defer its discussion, and to adjourn all consideration of its recommendations, Dr. Bergin—the originator and active promoter of this effort at elevating the standard of medical education in Ontario, after urging that, whether designed or not, the postponing consideration of the report, as proposed, till next session would be to kill it for years to come—is further reported as saying:

"I feel that we have too many medical schools; and I feel that all the opposition that we have to attempts to advance the interests of the medical profession of this country comes from the schools; and if they desire it, and continue in this course, the result will be that the profession will, as one man, rise up and demand that the school men be excluded from this council because of their opposition to every advance in medical and preliminary education."

When, in 1887, the Legislature restored to the University of Toronto its Medical Faculty, its authorities were most anxious to prevent, if possible, the multiplication of schools; and it is important that you should know that precisely the same invitation to co-operate in the revival of the Medical Faculty was extended to the Trinity and to the Toronto Medical School. Dr. Geikie refers to such a combination of forces as was thereby aimed at for the creation of one efficient medical school as an attempt at the impossible; and in doing so incidentally admits the fact that such a union was freely offered to him and his colleagues. Addressing the Attorney-General, he says: "You speak of 'union of colleges,' and this was suggested in 1887; but medical colleges large enough to require the services of a complete staff of professors and other teachers can no more be rolled together than can large congregations or public schools; and it is never wise to attempt the impossible!" The remark only furnishes another proof of Dr. Geikie's failure to comprehend the condition and requirements of a thoroughly equipped medical school. In

reality the united school would have been small in comparison with any of the great schools of Europe. That of Edinburgh, for example, numbers fully 2,000 medical students. The co-operation of the ablest men in both schools, superadded to the resources of the University and its efficient staff of instructors in science, would have hastened the development of what -unless the Legislature of Ontario yield to the misrepresentations of interested and unscrupulous defamers, and strangle it in its cradle—is destined, I confidently believe, to become one of the greatest medical schools on this continent.

How far the proposition for united action on this new and comprehensive basis was fully considered and dealt with by the members of the Faculty of Trinity Medical College, I have no means of determining; but of Dr. Geikie's action, and of the motives that guided him, we are left in no doubt. In his letter to the *Globe*, of date March 23rd, 1887, he says: "I think it will be ample time to give the subject full consideration when we learn that the Government of Ontario, with the cordial support of our Provincial Legislature, has fully decided to create, equip, and endow liberally a new medical teaching body; and to provide for a staff of the best teachers the country can furnish, each of whom shall have a salary secured to him of not less than $2,000 a year for each of the principal chairs; and a suitable retiring allowance when, from age or ill-health, he is no longer able to discharge his duties. Till this is done, the project is a mere 'castle in the air.' When it has assumed this tangible form, I am quite sure 'Trinity Medical School' will accord to it a most careful and respectful consideration."

I leave, sir, to yourself and to the Attorney-General to judge how far this avowal of the Dean of Trinity Medical School in 1887 harmonizes with the "disinterested" protest of the same person in 1891 against the application by the state of public funds of any kind in promoting medical education. It is sufficient for me to invite your attention to the evidence I have adduced to show that while, by the co-operation of the instructors of the University Medical Faculty with the professors and lecturers in Arts and Science, enormous advantages are secured to the medical students of Ontario; and they have for the first time opportunities placed within their reach that heretofore had to be sought in British or foreign schools; yet, so far as the instruction pertaining to strictly medical subjects, it constitutes no charge on the funds of the University.

University of Toronto,
Feb. 22nd, 1892.

Meeting of Medical Societies.

CLINICAL SOCIETY OF MARYLAND.

Baltimore, February 5, 1892.

The 261st regular meeting of the society was called to order by the president, Dr. Robert W. Johnson.

Dr. W. B. Platt read a paper on "Free Dispensaries, or the Physician and the Poor." Dr. Platt in his dispensary work adopts, as nearly as possible, the following plan: Inhabitants of certain squalid alleys, well known to him, are treated without question; the destitute and forlorn, whose aspect is unmistakable to one having dealings with the poor, come in first of all for treatment; mechanics, artisans, or laborers out of work and out of money, and the poor families of drunken and worthless men, are all entitled to free treatment; adults who have to pay for their board and lodging out of wages less than $5 per week are treated free; house servants, earning $10 and $12 per month, can and do pay physicians for advice.

Dr. I. E. Atkinson said this subject, as Dr. Platt has pointed out, bears upon the patients, the physicians in attendance, and the profession at large. The abuses of dispensaries is a world-wide complaint, and the difficulties that stand in the way of correcting them are almost insuperable. In the first place, the presence of a person at the dispensary is a confession of poverty, and, when questioned as to his financial condition, nearly every patient is prepared to say that he is unable to pay the fees of a physician. Occasionally one encounters patients who, when questioned, avow their ability to pay and are properly excluded. I think that the evils of dispensary service are more apt to be developed in dispensaries others than those in which patients are used for clinical purposes. The presentation before a class of students is, to persons who are not degraded, a very disagreeable procedure, and they will refuse to come again unless compelled by necessity.

What kind of patients are entitled to relief? Every one admits that the pauper is a proper person. There is not so much unanimity of opinion with regard to the relief of those persons who are brought to that condition by their own vices. Never mind what his faults, nor what his vices, nor how utterly beyond the pale of ordinary sympathy he is, as soon as he is sick he becomes a worthy object of charity. In this way medical charity differs from almost every other kind of

charity. Dr. Platt mentions another class that especially appeals to my sympathy, namely, the wage-earner who makes $10 per month. As to whether or not he shall pay depends entirely upon how much he is called upon to pay. A fee of one dollar would be ten per cent. of his income for the month, and his medicine would perhaps cost five per cent. more. It may be that he should not be the beneficiary of a free dispensary, but of a provident dispensary, the absence of which in Baltimore I very much regret. I further believe that the man who earns $1.00 or $1.50 per day, and supports his family, is entitled to a modified relief. This man, by careful economy, is able to keep his family alive, but he cannot support them in comfort. Just as soon as a member of his family falls sick, his expeuditures are enormously increased, while his income remains the same or is diminished. If he himself falls sick, the income stops while expenses increase. I think that one of the great needs is that modified form of charity which we recognize as a provident dispensary. This idea of a provident dispensary is no. a new one. The individual pays into it so much per month, and his membership entitles him to receive the services of good, intelligent physicians, who are properly paid for their services by the association, and gets his medicine at a reduced rate. Membership in the dispensary is only granted to those who receive a certain maximum of wages. Such dispensaries have been in existence in England for fifty years, yet the number is small. The justice of them, the propriety of them, and the benefits to be derived from them are so manifest that it is difficult to understand why it is that such a limited popularity should be accorded to them.

That there is dreadful abuse in dispensary practice I am convinced, but that the abuse is not altogether on the part of the patients, I am also convinced. There are few ordinary day laborers who feel able to pay the full fees of physicians and the prices of the pharmacist. Some do it from pride, some from principle, and some they know not why. But in case of continued sickness it is absolutely impossible for them to pay physicians' fees, and they are forced into incurring debts which they know they cannot pay. I am an advocate of that form of relief which shall not pauperize the individual, but will enable him to secure for himself and family proper professional advice and necessary medicines without too great a strain on his purse.

Dr. Platt: I think Dr. Atkinson's point in regard to there being less abuse in dispensaries where patients are used for clinical material is well taken; and yet the great howl that has gone up recently has been on account of a dispensary which is used almost exclusively for purposes of instruction. I think there are many persons who are perfectly shameless about getting charity. There is generally a look about a person who lives poorly and miserably that enables you to spot them as quickly as you can tell a wharf rat from a common one. They have poverty written all over them. There is a middle class, whose earnings are not much, yet who have deposits in the savings bank, and ought to pay. There are physicians who would make a reasonable number of visits at half price, and they can get reduced rates at the pharmacists. As to having patients pay at a dispensary, that has been tried. The only thing that has not been tried thoroughly is to carefully investigate each patient by a visit to his home. I have had people come to me at the dispensary who owned houses and had bank accounts, others with a large number of children, all receiving good salaries. I think the key to the whole matter is to look up each individual and see whether or not he can pay. I think there are very few physicians in this room who charge all persons alike. If a patient cannot pay my full fee, I treat him for less.

Dr. Herbert Harlan: I have had experience with different dispensaries ever since my student days. I believe that at the dispensary of the Maryland University, where patients are used for clinical purposes, there is very little imposition. It may be on account of the large class of students, for the tendency of people is not to go before a class of students. I have known a good many patients to go to that dispensary on other days of the week, and to absent themselves on the days of the clinic. There is, however, quite a large class of people who like to hear their cases discussed. The Baltimore General Dispensary is not imposed on much, because the physicians visit the patients' houses and see whether they can pay or not. The great abuse is undoubtedly in the special dispensaries. We have tried a good many devices to prevent those who ought to pay from receiving services free. One was for the physician to question them as to their ability to pay. Sometimes they answer "Yes," sometimes "No." Some say they can pay, but others who can pay are treated free. Here is the point that I want especially to raise here. At a special dispensary it is a daily occurrence for patients to say, "Doctor So-and-so, my family physician, sent me here to have my case treated." Physicians themselves are not as particular about these things as they might be. We ask such people if they pay their family physicians, and they reply, "Certainly we do." Then we refuse to treat them. We have tried in another way to prevent abuse, namely, by having a clergyman, who is regularly employed for the purpose, to go about the waiting-room and question the patients, and act as judge as to who shall or shall not be treated. This, I think, is a move in the right direction. We are indebted to Dr. Platt for calling our attention to this matter, and we ought all to make an effort to do away with the abuses.

Dr. I. E. Atkinson: The physician who charges but small fees knows that in many cases his patient cannot pay the fees of a special practitioner. I frequently have had patients who pay me go to a special dispensary. They do not ask my opinion about it. They say they cannot pay specialists' fees. I think the standard in regard to this class of patients should be a little different from that of the class going to the general dispensaries.

Dr. J. Edwin Michael read "A Report of Eight Additional Cases of External Perineal Urethrotomy without a Guide," these cases being in addition to nine cases already reported by him in the spring of 1887.

Dr. Robert W. Johnson spoke on "A Convenient and Comprehensive Method of Instrument Disinfection," and exhibited the apparatus which he devised and uses. Dr. Johnson boils everything except himself, his patients, and the rubber tissue. He boils ligatures, instruments, needles, gauze,

etc., and also the trays which hold them. The boiler is a plain tin one, large enough to accommodate the trays, with spigot attached near the bottom. A nest of elongated trays of granite-ware is found most convenient. Before leaving his office he goes over the instruments that will be required and puts them in a tray. The dressings to be used are put in another tray, and so on, and finally the trays are built up, one upon another, and all are put into the boiler, which is put in the back of the wagon. At the patient's house the boiler is filled up with boiling water, put upon the stove and boiled for twenty or thirty minutes, while the patient is being prepared for operation. When ready for operation, the trays are lifted out by means of sterilized button-hooks. The boiler is put in an elevated position, a rubber tube attached to the spigot, and the boiled water is used for irrigation. It makes no difference whether knives or dressings touch the sides of the trays, for they are quite aseptic.

Dr. Herbert Harlan asked what means were taken to prevent the rusting of instruments in boiling. He had noticed the curious phenomenon that the steel blades of a set of knives with aluminium handles rusted more readily than those with ivory handles.

Dr. Chunn asked Dr. Johnson's method of preparing his hands for operation.

Dr. Johnson: By adding a slight amount of bicarbonate of soda to the water, rusting of the instruments during boiling is prevented. I sometimes use bichloride on my hands, and sometimes potassium permanganate, cleaning it off with oxalic acid. The latter is probably the best method.

Correspondence.

PROFESSIONAL ETIQUETTE.

Editor of THE CANADIAN PRACTITIONER:

I ask the privilege of space in your valuable journal for the publication of the following statement of facts, which, I think, should be told with the object of showing the sharp methods resorted to by, I sincerely trust, only a few of our aspiring young doctors who are striving to make a livelihood in this far-famed city of Toronto. The governing principle of these newly-fledged specimens of the profession is very much like the well-known advice of the canny Scotchman to his son, "Get money, honestly if you can, but get money," which might read, "Get practice, honestly if you can, but get practice." The following are the particulars:

Yesterday (Sunday, 28th February) I was hastily summoned by a Mr. H. H. Cossit, living on Park Avenue, to attend his three-year-old little son, whom, he stated, had taken a fit and was frothing at the mouth. I immediately accompanied Mr. Cossit to his residence. On the way there I obtained all the particulars he could give as to the general health, diet, and surroundings of the child: also his own idea of the cause of the trouble. He also informed me he had called at the residence of several doctors on his way, but found them from home, until he came to me. When I arrived I found a person there busily engaged at what I first thought was washing his hands in a large basin on a chair along side of the cot in which the little patient lay. Asking this person, "Are you a doctor?" he replied, "Yes: Dr. F." I then asked what had been done for the child. He replied, "I am going to give an injection of soap and water." Handy Andy's soap and water, which got him the nickname of "Suds," occurred to me, so ludicrous was the position. On making further enquiries from the mother, she informed me that the little patient had just been taken out of a hot bath, given by a neighbor woman, and seemed to be very much better. The child was lying naked, wrapt up in blankets, and, on examination, I found the little arms twitching and the teeth firmly set. I tried to open the child's mouth, but could not succeed at first. A second attempt succeeded, and on withdrawing my finger it was nearly caught between his teeth. The child was insensible, but breathed freely. I then expressed my approval of the injection, as it was ready for use, and suggested the addition of castor oil, which was immediately brought, but not used. The vial was almost empty. Just as this person was about to administer the injection of soap and water, without the castor oil, another medical gentleman appeared on the scene, who was addressed as Dr. F. Without saying a word to me, this last arrival, very much excited, and in a fussy way, took the 1 oz. syringe from the first Dr. F. and began throwing up the soap suds with the syringe. I had in the meantime turned the child on his left side, separated the nates, and exposed the anus. When the last-named Dr. F., whom I began to think by this time was the real Simon Pure, had filled and emptied the syringe a number of times, with little success; but, persisting in throwing up the soap and water, a lump or two of hard fæces were dislodged, and

appeared at the verge of the anus, but it seemed the child was unable to expel them, and I suggested to Dr. F. No. 2 to smear his finger with castor oil and break up the hard scybala. He handed me the syringe, and, having oiled his finger, succeeded in bringing away one or two lumps of scybala. He then retired to wash his hands in an adjoining room, and in his absence I removed the cap of the syringe and piston and poured into it about a tablespoonful of castor oil, replaced the piston and cap, and with a little gentle force injected the oil into the rectum. This was immediately followed by a free discharge of scybala. Dr. F. No. 2 by this time returned and said, "It is all right now," shook hands with the mother of the child and all the other women, and was about to leave, when I whispered to him, "You had better wait a little while longer, as the child is not over this yet." The little patient's teeth were still fixed, and the twitching of the arms, although not so violent, was still visible. In the meantime Dr. F. No. 2 had instructed Dr. F. No. 1 to make a mixture of 5 to 10 grains of bromide in water. He delayed giving the bromide mixture and tried to give castor oil by the mouth. I retired to wash my hands, and on my return to the patient I observed Dr. F. No. 1 administering the bromide mixture, with what success, the patient's teeth being firmly closed, I cannot say. Observing how matters stood, I felt that both Dr. F. No. 1 and Dr. F. No. 2 were bound to ignore me in the case, although I was the first doctor, as we shall see, who saw the patient. Not being anxious to make a scene in the room before the anxious parents and friends, I suggested that it was not necessary for so many doctors, that the parents should decide which one of us they preferred. The father replied he would leave the decision to his wife, and she named the fussy, nervous Dr. F. No. 2 to be her choice. Without any comment or remark, I bade them good evening (without shaking hands all round) and retired.

That is the case. I have given the particulars, for without the particulars justice would not be done to the position. I learned afterwards that Dr. F. No. 1 was no doctor at all; a kind of fraud. I believe his name is Smith; one of those hopeful medical students of this fast and busy modern world who, one of these days, may be a star of any magnitude to elevate the standard and honor of the gentlemanly, honorable profession of medicine, so gloriously adorned by the Dr. F. No. 2, with whom this hopeful student, *nee* Dr. F. No. 1, is, I understand, domiciled.

What do you think of the case and of the professional conduct of these aspiring doctors?

Yours truly,

GEORGE J. POTTS.

THE "ISOLATION HOSPITAL."

Editor of THE CANADIAN PRACTITIONER.

SIR,—Some weeks ago a rumor reached me that the members of the profession connected with the Toronto General Hospital were very much agitated concerning a statement accredited to me. This alleged statement was to the effect that the Local Board of Health and myself, in establishing a hospital, intended not only treating persons suffering from diseases of an infectious character, but also that we purposed receiving those suffering from non-infectious disorders. Now, in view of the fact that the name "Isolation Hospital" clearly indicated that the institution would be used only for cases of infectious disease, I did not consider it necessary to contradict the rumor.

But as I am again informed that the impression conveyed by this rumor regarding the isolation hospital still exists among many of the profession, and, further, that had they not been given so to believe they would never have appeared before the Board of Health in the matter, I consider it but right to state publicly that this statement is absolutely untrue and without foundation.

NORMAN ALLEN,
Medical Health Officer.

Toronto, March 9, 1892.

IT is proposed to hold in Paris, in 1893, an international congress composed of physicians, jurists, hygienists, economists, and sociologists, for the study of questions relating to prostitution and the propagation of syphilis.—*Exchange.*

Pamphlets Received.

Trendelenburg's Posture in Gynecology. Reprint from transactions of the Association of American Obstetricians and Gynecologists. *Total Extirpation versus Leaving a Stump in Operations for Uterine Fibromyomata.* Reprint from the *New York Journal of Gynecology and Obstetrics.* By Florian King, M.D., New York.

Retro-Peritoneal Tumors, their Anatomical Relations, Pathology, Diagnosis, and Treatment, with a Report of Cases. By Albert Vander Veer, M.D., consulting surgeon to St. Peter's Hospital; attending surgeon, Albany Hospital; professor of didactic, clinical, and abdominal surgery, Albany Medical College.

To What Extent is the Diagnosis of Pregnancy Possible in the Early Months? By Charles Jewett, A.M., M.D., professor of obstetrics and diseases of children in the Long Island College Hospital, Brooklyn. Reprinted from the *Brooklyn Medical Journal.*

Removal of the Uterine Appendages, with Results. By M. B. Ward, M.D., professor of gynecology, Kansas Medical College. Reprinted from the transactions of the American Association of Obstetricians and Gynecologists.

Report of Cases of Cholecystotomy, with Special Reference to the Treatment of Calculus Lodging in the Common Duct. Reprinted from the transactions of the American Association of Obstetricians and Gynecologists.

Report on a case of Hæmatophilia, or a Family of Bleeders. Reprinted from the *Archives of Pediatrics.*

On the Demonstration of the Presence of Iron in Chromatin by Micro-Chemical Methods. By A. B. Macallum, M.B., Ph.D.

The Atmospheric Tractor and the Uterine Safety Tube. By P. McCahey, M.D. Reprinted from the *Southern Medical Record.*

Atresia of the Genital Tract. Reprint from transactions of the American Gynecological Society.

Personal.

AT the recent meeting of the Medical Society of the State of New York, held the first week in February, the following were elected honorary members: Dr. Lewis S. McMurtry, of Louisville, Ky.; Dr. Charles A. L. Reid, of Cincinnati, Ohio; Dr. W. E. B. Davis, of Rome, Ala., Drs. Adam H. Wright and James F. W. Ross, of Toronto, Canada.

AT the last meeting of the Ontario Board of Health, Dr. Charles McLellan, of Chicago, formerly of Trenton, Ont., was appointed to look after the sanitary appliances of Ontario which are to be exhibited at the World's Fair.

SIR JOSEPH LISTER, of London; Sir William Turner, of Edinburgh; Dr. Credé, of Leipsic; and Dr. Lusk, of New York, were elected honorary fellows of the Obstetrical Society of London on February 3rd, 1892.

DR. J. H. BURNS, of Toronto, started for Southern California on March 7th. He expects to remain there a few weeks.

DR. BULL, of Toronto, has been in California for several months.

Therapeutic Notes.

ANTIPYRIN IN WHOOPING-COUGH. — The writer sums up his hospital experience as follows: About eighty cases of whooping-cough have been recently treated here with antipyrin, as many decigrammes as the child was years of age (or xv. grs. for a patient of ten years) being given morning and evening. The remedy was gratuitously given to the parents in powder form and ordered to be administered in sweetened water. Fifty-seven of the cases were seen at least twice again, so that a definite opinion could be formed of the action of the remedy.

In forty-one improvement was evident at the second visit (after three to seven days), and in some cases the improvement could be characterized as striking. In five cases, alleviation of the symptoms was not distinctly affected till the third or fourth visit. The improvement was only temporary with five of the patients; three of these had brothers and sisters simultaneously suffering from whooping-cough. Generally it was found that where several children of the same family were affected at the same time, the disease was more obstinate and ran a more tedious course. This is consistent with the opinion of Prof. Hagenbach, that the children mutually reinfect one another under such conditions. No improvement could be traced in seven cases (three of these, however, were only seen twice), and four patients got worse at first; these were, however, such as had only recently (from three to ten days) developed the characteristic symptoms of the disease, and three improved subsequently.

Of the numerous cases that only returned once to the hospital, a considerable proportion would doubtless be such children as were so much benefited by the remedy that the parents did not think it necessary to bring them again. In several instances an unmistakable relapse was evident when the administration of antipyrin was omitted by the neglect of the parents.

The beneficial effect of the remedy was therefore established in four-fifths of the total number of cases; in a few it was astonishingly marked, but in none was it at all uncertain. The attacks diminished in violence and also in frequency, particularly at night. The remedy was always well borne, vomiting was arrested, the appetite increased, the children became generally more cheerful and slept better. The course of the disease was decidedly shortened, although necessarily the nature of our patient treatment does not admit of the reckoning of an average duration. Complications (broncho-pneumonia) were rare, but did not appear a few times (particularly with rachitic patients) during the antipyrin treatment. *Medical Press and Circular.*

CAMPHOR-MENTHOL IN CATARRHAL DISEASES.—In the *Jour. Amer. Med. Assn.*, Oct. 24, 1891, Dr. Seth S. Bishop gives his experience with this compound, the liquid resulting from rubbing together equal parts of camphor and menthol and diluting with a mineral oil. It gave excellent results in relieving the swelling and irritability of acute nasal catarrhs; a few repetitions securing the relief of the stenosis and obviating the operative measures which had seemed unavoidable. Its effect in laryngitis has appeared as happy, and its injection through the catheter into the Eustachian tube and tympanum has been attended by only good results. For the latter purpose a solution of 3 to 5 per cent. is as strong as it is safe; most noses and larynges will bear 10 per cent., while in marked hypertrophic rhinitis, with copious discharge, even 25 per cent. is well borne. "Finally, camphor-menthol contracts the capillary blood vessels of the mucous membrane, reduces swelling, relieves pain and fulness of the head or stenosis, arrests sneezing, checks excessive discharge, and corrects perverted secretion."—*Therapeutic Gazette.*

TREATMENT OF RINGWORM.—Kerley (*N. Y. Med. Jour.*, October 10th) advocates the following: Two grains of bichloride of mercury dissolved in a small quantity of alcohol are added to one ounce of equal parts of kerosene and olive oil. This should be thoroughly rubbed into the diseased areas, and the whole scalp thoroughly saturated once a day until a smart inflammation is produced; the part should then be covered with a simple ointment until the inflammation has subsided, when the treatment may be resumed, but the applications may be made less frequently and less vigorously. A variation in the treatment, which he sometimes found useful, was to rub into the diseased areas on alternate days with the above a saturated solution of iodine in absolute alcohol. In all cases the scalp should be frequently washed with soap and water. Slight inflammation of the scalp was induced in most of the cases, and in a considerable number a moderately severe squamous condition of the scalp followed on the cure. This was remedied by the application of a 3 per cent. solution of resorcine frequently. This treatment effects a cure in from six to nine weeks.—*Med. and Surg. Reporter.*

Miscellaneous.

A NEW HOSPITAL FEATURE FOR PREVENTING THE SPREAD OF INFECTIOUS DISEASES.—*The Medical Press and Circular*, November 4th, has a description of a new hospital at Berlin, called the Emperor and Empress Frederick Children's Hospital. The pavilion for diphtherial patients has a peculiar arrangement, which is designed to imprison the contagium of that disease, whether brought there or generated there. This pavilion is entered by what is known as the "schleuse," or sluice. No person is allowed to pass directly into the ward from the outside world, but must pass from the porter's room into the "schleuse." There the visitor must take a bath and change his clothes; the same process must be gone through with on leaving the pavilion. The hope is that not only will these precautions prevent the conveyance of the disease to any one outside the hospital, but also to the inmates of other parts of the institution. *Jour. A. M. A.—Med. Age.*

THE February issue of *The Quarterly Register of Current History* (Detroit, Mich., $1 a year) is a model one. Without beating about the bush, it strikes right at the very heart of its subject-matter. From a clear and interesting treatment of international affairs, it proceeds to a series of splendid articles on "Affairs in Europe," "Affairs in Africa," "Affairs in Asia," and, last but not least, "Affairs in America." Under this last heading is included the presidential discussion, the proceedings of the congress and the legislatures, the state of trade, finance, and general politics. An elaborate treatise on the latest developments in Canada is an interesting feature of the number.

An American Text-book of Surgery, by Professors Keen, White, Burnett, Connor, Dennis, Park, Nancrede, Pilcher, Senn, Shepherd, Stimson, Thomson, and Warren, forming one handsome royal octavo volume of about 1,200 pages (10 x 7 inches), profusely illustrated with wood-cuts in text, and chromo-lithographic plates; many of them engraved from original photographs and drawings furnished by the authors. Price—cloth, $7; sheep, $8.

An American Text-book of the Theory and Practice of Medicine according to American Teachers, edited by Wm. Pepper, M.D., LL.D., provost of the University of Pennsylvania. To be completed in two handsome royal octavo volumes of about 1,000 pages each, with illustrations to elucidate the text wherever necessary. Price, per volume, cloth, $5; sheep, $6; half Russia, $7. For sale by subscription only.

HYGEIA SPARKLING WATERS.—A variety of these waters are prepared by J. J. McLaughlin, manufacturing chemist, corner of Queen and Victoria Streets, Toronto, as follows: lithia b.p., potash B.P., soda B.P., vichy, seltzer, double soda, and carbonic. They are being largely ordered by physicians in Toronto, and we think we can safely say they have given universal satisfaction.

GRIPPE MORTALITY.—According to the State Board of Health Mortality Report just issued, out of a total of 123,878 deaths in New York State during 1891 it is estimated that 10,000 were due to influenza. The death rate for zymotic diseases was 178 per thousand, as against 169 per thousand last year. The average for the past five years is 193. The deaths from influenza were distributed over the whole State. —*Med. Rec.*

THE UNIVERSITIES OF THE WORLD.—There are 147 universities in the world, of which the largest is in Paris, with 9,215 students; the next in Vienna, with 6,220; the third in Berlin, with 5,527. The smallest is a branch of Durham University, Fourah Bay College, in Sierra Leone, with twelve students and five professors. —*Med. Rec.*

WE desire to call the attention of candidates for the examination of the College of Physicians and Surgeons of Ontario to the advertisement in another column regarding the coming examination in April.

A NEW HOSPITAL FOR CHICAGO.—The Scotchmen in Chicago propose to erect a hospital to commemorate their beloved poet, which is to be called the Burns Free Hospital.

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THE CARDIAC PHENOMENA OF RHEUMATISM.*

BY ALEXANDER M'PHEDRAN, M.B.,
Associate Professor of Clinical Medicine, University of Toronto.

Rheumatism occurs with much less frequency in this country than in England and the northern parts of Europe. Some years ago there were at one time ten cases of heart disease in the Toronto General Hospital, and all were from England and had acquired the disease in that country. The reason for our greater immunity is to be sought for probably in our dryer climate chiefly, but largely also in the mode of living in the two continents. Our poorer people live on a much more bountiful diet, of a better quality, than their peers in the old land, and are better housed, and are therefore better able to resist such climatic influences as are supposed to bear a causative relationship to the disease. Nevertheless, rheumatism, with all its untoward phenomena, occurs with painful frequency in this country, as is attested by the relatively large number of cases of heart disease met with, and the great majority of them own a rheumatic origin.

On few diseases has more been written, and in no disease is there a greater feeling of uncertainty as to the cause than rheumatism. On but one point, apparently, are most agreed, viz.: that the disease is due to some poison in the blood, and to the irritation of such poison is due the widely-distributed lesions resulting. As to the nature of this poison opinions are almost as varied as their authors; but most of them can be included under two classes, viz.: first, those holding the cause to be a chemical irritant, as lactic or uric acid; and, secondly, those believing it to be a bacterium, probably a micrococcus or a bacillus. It is very probable that both may be correct—that the group of phenomena included under the term rheumatism is not a simple disease, depending upon a single cause, but rather a series of diseases with similar phenomena, produced by a variety of causes. We can scarcely explain the multiform characters of rheumatism, acute and chronic, in any other way.

If on further investigation it is found that bacteria are capable of producing rheumatism, it will probably be found that they are the always active agents in the causation of acute rheumatism, mild or severe, and then, of course, also of the heart lesions occurring in rheumatism.

Recently it is reported that the staphylococcus albus was constantly found in cultivations from the blood of a case of chorea with acute endocarditis, and, once, the S. aureus.* There is little room to doubt that the chorea in such a case was simply a manifestation of rheumatism.

German pathologists are becoming more and more unanimous in viewing primary endocarditis in all its forms as due to germs of some kind, the resulting changes in the endocardium, whether thickening, warty excrescences, or ul-

*The address on Medicine, Ontario Medical Association, Toronto, June, 1891.

* *British Medical Journal* supplement, '91, Vol. I., 149.

cerations, being due simply to difference in virulence of the germs.

Whatever the cause of rheumatism may be, it is constant in its selection of tissue to attack — the fibrous structures only are primarily affected, but these may be in the most varied situation. We have so long associated the term rheumatism with the swollen joint, fever, and sweat, that we have come to look upon all other manifestations as accidents or complications; but the affections of other fibrous structures are quite as essential a part of the disease as the joint inflammation, and this broader conception of the disease is forced upon us by the study of these other phases, especially as met with in children, in whom the joint affection is usually mild, and often wholly absent. The so-called growing pains may be due to a neurosis, or a rapid development of epiphyseal cartilages;* yet the great majority of them are rheumatic, but, on account of the plumpness of the child's limb, usually show no swelling. However, even the mildest of them may be accompanied by the most serious cardiac disease.

It is necessary to refer briefly to other ways in which rheumatism may manifest itself, especially the more unusual. One of the most important, and probably least frequently recognized, is rheumatic inflammation of the throat. It is common among adults at certain seasons, and not infrequent in children. In many cases it recurs repeatedly. Last year there was a girl, æt. 12, in the Hospital for Sick Children of this city who presented a good example of this form of rheumatism, recurring from time to time. She had marked stenosis of the mitral orifice with a protracted history. The endocardium appeared to have been the seat of mild recurrent rheumatic attacks, which caused gradual, but, in time, extreme narrowing of the mitral orifice. The condition of the heart was verified by the autopsy after her death at the Girls' Home.

Another case occurred in the practice of my friend, Dr. Jas. M. MacCallum. The child, four years old, was supposed by the parents to have diphtheria; but there was no membrane. The left shoulder was found tender and somewhat swollen, and further examination revealed a well-marked endocarditis of longer duration probably than either the arthritis or the throat disease.

* Jacobi, *Medical News*, 1886, Vol. I.

Occasionally the rheumatic process shows itself in an attack on the subcutaneous tissues, causing the formation of nodules over the bony prominences. This may be the only sign, or it may occur with articular inflammation. There was such a case in the Hospital for Sick Children last year. The boy had slight inflammation of the wrists and ankles, and, at the same time, many nodules up to the size of a bean formed over the occiput, the spinous processes of the vertebræ, the scapulæ, the iliac crests, the elbows, and the tibiæ. They all disappeared quickly with the recovery from the rheumatism. There was also disease of the mitral valve with regurgitation, of which he has since died. Such nodules are of more frequent occurrence in England, and are sometimes found to persist. They appear to be more frequently met with in association with pericarditis.

The various aspects of erythema multiforme are frequently due to the same cause. With them may be included many cases of urticaria. Erythema nodosum is possibly always of rheumatic origin, and should be treated as a probable sign of that disease. Other unusual phenomena as possibly of rheumatic origin are inflammation of such serous membranes as the pleura, peritoneum, and meninges, of the sclerotic coat of the eye, and of the nerves. It is probable also that mild attacks of rheumatism occur without showing any local changes. In these, local inflammations may possibly occur in the deeper tissues beyond the reach of examination—there seems no reason why such tissues should escape the influences of a poison whose powers are so potent upon superficial tissues.

In cases with any of the foregoing, as well as with the commoner manifestations of the rheumatic process, the heart may become involved —simultaneously or as a sequel, or, what is of special importance to remember, it alone may be the seat of attack. Hence the rheumatic heart lesion is not an accident in the history of any case, unless, indeed, all local inflammations, whether of the joints or other parts, are to be looked upon as accidents; so that it should be included among the list of symptoms of rheumatism. Probably the heart is affected oftener than any single joint. We cannot insist too strongly on the importance of being on the alert to the fact that, in children especially, any sign of rheuma-

tism, be it never so mild, is liable to be accompanied by disease of the heart, it may be, of the most grave character. As the signs of rheumatism, when latent, may so readily escape our observation, I would urge the necessity of examining the heart in all pyrexial attacks of uncertain origin when they occur in children; otherwise we may miss for days a lesion of the heart which, had we known, we might have mitigated, if not prevented.

Cardiac lesions seldom occur in the adult apart from an acute attack of rheumatism. After the third decade, our chief anxiety in regard to our patients with acute rheumatism is in connection with the future usefulness of the joint; while with our younger patients we have little fear as to the complete recovery of the joints, our anxiety now is almost wholly concerned with the heart. The younger the child, the more probable is it that the rheumatism will fasten on the heart, to the exclusion of the joints or other structures.

In the adult there is probably, as Sibson* found, a striking relation between the degree of severity of the articular affection and the frequency, as well as the intensity, of the heart disease. He found that in only 25 per cent. of all his severe cases did the heart present no signs of affection. This relationship probably becomes more pronounced with the advance of age; that is, it is closer at 40 than that at 25 or 30 years of age. The exact numerical relationship between heart disease and rheumatism at the different ages is very difficult, not to say impossible, to determine, because slight attacks of endo- and pericarditis readily escape detection, even by the most acute observers. But there is no doubt that Dr. Church's results are sufficiently near the truth to illustrate the great preponderance of cardiac affections in young subjects. He found the percentages of cardiac disease in the successive decades up to 50 years of age to be 83, 69, 51, 30, 21.† These results indicate practically that in infancy rheumatism always attacks the heart, and after infancy up to ten years the heart escapes in very few cases, and it is to be borne in mind that at this age rheumatism is almost always mild, often latent even. The occurrence of symptoms of acute articular rheumatism in children should be viewed with suspicion, as many, if not most, of such are not rheumatic, but due to sepsis, causing inflammation of periosteum, bone medulla, and similar structures. Some cases have been reported of late as rheumatism that bear strong evidences of being due to septic poisoning.*

No adequate explanation has been offered to account for this greater proclivity to heart disease in rheumatic children. It seems to me probable that their strong tendency to anæmia has a causative relation. Cheadle says that all such children early become anæmic, and my own experience accords with his. Bramwell† and some others, however, believe anæmia less liable to develop in children than in adults, but the instability of the nervous system in children often masks the actual anæmia existing by disturbance of the vaso-motor system. The relationship of anæmia, as a predisposing cause, is strikingly borne out by the greater frequency of rheumatism in females from 11 to 15 years of age, in whom it is said to be three times as frequent as among males of the same age;‡ and females at this age are peculiarly liable to anæmia. In this manner we may account, at least partly, for the greater frequency of mitral stenosis and chorea among females.

Next to age, the occupation and general condition in life have most influence in the productions of heart disease in rheumatic cases. Perhaps these have more to do with the degree rather than the occurrence of the disease. The ill-nourished and insufficiently clad, living in unhealthful surroundings, furnish the greatest number of victims. These conditions render such people more exposed to the causes of rheumatism and more vulnerable to its influence.

The influence of sex is worthy of note. In youth females are more liable, because their labor and exposure are quite as great as males, and they are much more frequently anæmic. Sibson says that young females with rheumatism are nearly always attacked or threatened with endo- or pericarditis or both. In after life males are most frequently the subjects of cardiac disease, owing to their greater exposure and labor; perhaps also on account of their greater indulgence of the appetite.

* Reynolds' system.

† St. Bartholomew's Hospital Reports, Vol. xxii., p. 273.

*I would commend to your notice a paper by our friend Dr. Peters, to be read in Surgical Section.

† Diseases of the Heart.

‡ British Collective Investigation Record.

Of the cardiac affections, endocarditis is much the most common, the mitral area being especially vulnerable. Endocardial inflammation generally begins early in the rheumatic attack —in the first week usually, but may occur in the second, the third, or even the fourth week. The more severe the rheumatic attack, the greater the liability to the endocarditis. If the patient escapes for the first week, and is under suitable care and medication, some believe that the heart should be secure from attack. It is the general opinion that endocarditis is proportionately much more liable to occur in second, and still more so in third, attacks of rheumatism, ever. although the successive attacks be less severe. There is a very probable fallacy in this view. No doubt in many cases of rheumatism there occurs inflammation of endo- or pericardium, or both, without manifesting any signs of its existence; permanent thickening of the endocardium may, however, result, and become at the affected points more vulnerable to the rheumatic poison in subsequent attacks. This offers the only reasonable explanation of this greater liability to cardiac implication in repeated attacks of rheumatism, as otherwise the liability should decrease with advancing age, and lessening in severity in the recurrent attacks. The truth of this is further borne out by the experience we have probably all had of cases who, having convalesced from rheumatism, have passed out of our hands without any signs of cardiac lesions that could be detected, and who some time later showed unmistakable evidences of heart disease, it may be, of a most serious nature. The greater frequency of heart disease in several attacks of rheumatism was believed by Sibson to be due to the increased strain thrown on the heart by the severity of the disease.* The fibrous structures subject to most strain seem to be most liable to attack; the increased labor of the heart may, therefore, induce inflammation of its fibrous structures.

In children, as with rheumatism, so it is with its cardiac phenomena, they are nearly always mild and trivial; all may disappear for a season, yet they too often recur, soon to persist, until the valve injury becomes serious, and, finally, fatal. In the rheumatism of children the slightest causes may induce relapses. They frequently tax the patience of the physician, and too often shake the confidence of the parents in his skill and treatment. In these recurrent attacks lies the danger to the child, as with each he becomes increasingly liable to disease of the heart. If the heart becomes once affected, the lesion is sure to increase with each relapse.

Such cases of rheumatism call for the most judicious management perseveringly carried out until the rheumatic condition has been wholly eradicated.

In endocarditis the inflammatory infusion takes place into the fibrous tissue of the membrane; the suface changes follow later. As compared with the serous membranes, as the pericardium and pleura, the inflammatory process is very circumscribed; this is owing to its slight vascularity. The reason hitherto assigned by most authors for the frequency with which the mitral valve is affected, and the rarity of the aortic, has been the greater strain to which the mitral is subjected. Later authors* give another cause which seems, on the whole, to be more potent, namely, the fact that the central parts of the mitral segments have some vascular supply while the aortic segments are quite non-vascular. The onset of endocarditis may be accompanied by pyrexia and an appearance of illness and distress in the child's face, even while at play; or the heart's action may be tumultuous with dyspnœa, restlessness, and anxiety from imperfect circulation. But such symptoms occur only in the severer cases. Valve disease gives no physical sign of its existence until it results in some deformity of the valve which either impedes or disturbs the current of blood in its passage through the orifice to whose margin its segments are attached, or impairs the functions of the valves so as to permit a reflux of blood through the orifice which they guard.

Sibson† says we are warranted in assuming that, in a considerable number of cases, the active stage of endocarditis is passing away at the time of the appearance of a murmur. As a general principle, it may be stated that the milder the endocardial inflammation the longer will a murmur be in appearing, and *vice versa;* in many mild cases, certainly no murmur ever appears. It is

* Reynold's System of Medicine.

*Ziegler's Pathology.
†Ibid.

probable that endocarditis may abate with complete removal of the exudative products, leaving no trace of the inflammation. Usually, however, some thickening persists, and, if slight attacks recur, in time the segments become adherent, causing stenosis of the mitral orifice, or, less frequently, probably, incompetence of the valves and regurgitation, on account of the deformity of the valves from shrinkage of the new tissue. I say less frequently because regurgitation results usually, if not always, from the more acute attacks, while mitral obstruction probably never does.

The first sign of mitral stenosis in about half the cases is a seeming reduplication of the second sound heard at the apex only. The first of these sounds is produced by the blood passing over the tense mitral valve, which only slightly narrows the orifice as yet; a sound is thus produced which is almost synchronous with the aortic sound, and both are heard in the apex only. As the case progresses the presystolic, or rather, at first, the diastolic character of the sound becomes apparent.*

If the lesion lead to incompetence of the mitral valve, the first indication will be a prolongation of the first sound of the heart as heard at the apex. Mitral obstructive murmurs probably always persist, but regurgitant murmurs may disappear. The former are organic, the latter may be functional, being due to adynamia of the cardia-muscle. This adynamia results in imperfect contraction of the mitral orifice during systole and consequent incompetence of the mitral valve. Such murmurs disappear as soon as the heart recovers its tone, but during their existence they are indistinguishable from those of organic origin; in both conditions, the heart is likely to be somewhat enlarged. While it is possible for murmurs in rheumatism to be functional, it is best, from a therapeutic point of view, to consider them all organic, and treat the case accordingly. It is worthy of remark that, in rheumatism, murmurs occur earlier than do the functional murmurs of any of the other depressing diseases, thus indicating a different origin.

Pericarditis.—For want of space only a brief reference can be made to this and to myocarditis. There is no cardiac affection, probably, more often overlooked, or whose symptoms are more often misinterpreted, than pericarditis. Nothing has mortified one more than to discover in the mortuary a severe pericarditis that was not suspected in the ward. The symptoms are so liable to be masked by those of the primary disease that the possibility of its occurrence should be constantly remembered in those diseases which it often complicates, especially in rheumatism and Bright's disease.

Unlike endocarditis, it is more likely to occur in the first than in subsequent attacks of rheumatism. It is much more apt to occur in severe than in mild cases, and is usually met with from fifteen to twenty-five years of age. It is rare in the young, yet one of the worst cases I have ever seen was in a child, aged six years, in the practice of my friend, Dr. Byron Field, of this city, last year. The child had a mild attack of rheumatism, the symptoms of which disappeared in a few days, when attendance ceased. Two weeks after the commencement of the rheumatism he was exceedingly pale-faced, exhausted, anxious, pulse very weak and rapid, respirations hurried and labored, so that he required to be propped up on pillows. On examination, the area of præcordial dulness was found slightly enlarged with a somewhat diffused impulse; the sounds were weak and somewhat indistinct; the temperature was slightly elevated. Over the præcordial area ill-defined friction could be detected. As was expected, autopsy showed the existence of a very severe pericarditis with abundant fibrinous exudate, and accompanied by a myocarditis affecting the whole cardiac muscle. This case illustrates the condition met with in pericarditis complicated by myocarditis at all ages. Severe, even fatal, cases of pericarditis may show very slight symptoms. Sibson found præcordial pain present in three-fourths of his cases; so that such pain, however trivial, should receive careful consideration in all cases of rheumatism.

Most authors agree in describing delirium of various forms as frequently present, even in the absence of febrile movement. When endocarditis complicates the case, the delirium is liable to take on a suicidal tendency; and of the character of *delirium tremens*, when there is some fever with prostration.

It was most marked in "dry pericarditis, dis-

* Sansom. Lettsomian Lectures, 1883.

appearing with effusion." Such pain was very marked in a case recently under my care, in which there was, as well, severe and obstinate pain, produced by the act of swallowing, probably due to the pressure on the pericardium posteriorly. The disease is usually latent, however, and will escape notice unless sought for with the utmost care. In all cases there is a tendency to rapidity and weakness of the pulse with dicrotism, probably from a certain degree of implication of the myocardium.

Myocarditis probably seldom occurs independently of inflammation of either the endo- or pericardium, especially of the latter. Maclagan, however, is very positive of the frequent occurrence of a primary inflammation of the heart muscle, and that it may be diagnosed by the weak, rapid dicrotic pulse. Its existence in any case, of course, adds materially to the gravity.

Prognosis.—With the exception of cases in which the cardiac muscle is seriously affected, the immediate prognosis is usually favorable; few die as the result of the heart disease apart from myocarditis. In young children, however, suffering from acute disease, the heart yields more rapidly to strain, probably on account of the immaturity of the tissues; hence they bear disease badly. But if they escape the immediate effects of the disease, the heart recovers itself more rapidly and develops more rapidly; hence compensation is soon established and emphatic. On this account we seldom see evidences of much impediment to the circulation, as great enlargement of liver and spleen, cyanosis and extreme dropsy; these are more frequent as age advances. Goodhart attributed this partly to the anæmia, with diminution in the quantity of the blood as part of the general wasting.* Cheadle gives another cause. "Children with severe heart disease, as a rule, die from other causes before the stage of grave tricuspid leakage is reached. Instead of the engorged liver and lung, with blueness, extreme dyspnœa, and general dropsy," as seen so often in adults, "there is rapid wasting, progressive anæmia, feebleness, and death from asthma rather than from the direct injury to the mechanism of the circulation."† Fagge‡ says the aspect of a child with cardiac disease is rather that of phthisis. He is pale and thin, with dilated pupils, a delicate skin, and quick pulse. In older children and adults, the ultimate prognosis usually depends on the degree to which the lesion causes interference with the functions of the heart. In young, well-nourished persons it is often amazing what extensive valve changes may be compensated for, and for what almost indefinite duration the compensation may be maintained.

In older persons the prognosis will depend greatly on the condition of the vascular system, being rendered less favorable by any sclerotic or other chronic changes that may be present or develop. Leyden says that age does not impede the development of compensatory changes in cases of valve diseases. With advancing age the cardiac muscle gains in volume and power, and the heart is the only organ whose comparative bulk increases with age, so that perhaps the heart of older persons has even more endurance than that of younger ones.*

In recent cases, we should not forget that the evidences of disease, especially mitral incompetence, and occasionally aortic obstruction, may disappear after some weeks, or, it may be, months. Over against this, unfortunately, we have to set two unfavorable possibilities, namely, that a lesion which, just after its development, but slightly disturbs the mechanism of the circulation may increase, from the tendency of the new cicatricial tissue to contract, and, secondly, that one attack of endocarditis predisposes to another, especially in the anæmic.

Then much will depend on the mode and circumstances of life. The prognosis is more favorable among the well-to-do, for while they are exposed to the liability of overfeeding, with its tendency to cause arterio-sclerosis and atheroma, they are spared the necessity of exposure and over-exertion, which so many of the laboring classes have to endure. In arriving at an opinion, all the circumstances of each individual case have to be taken into consideration.

The ultimate prognosis in the large proportion of cases is, without doubt, unfavorable, yet some go through life and attain old age with marked disease of the heart, and it is better to err on the hopeful side than take too gloomy a view of any case.

* Cheadle-Harveian Lectures, *Lancet*, 1889, Vol. I., p. 926.
† Ibid.
‡ Principles and Practice of Medicine, Vol. I., p. 983.

* Annual of the Universal Medical Sciences, 1890.

The late Austin Flint used to relate a very instructive incident from his own experience on the prognosis in heart disease. Shortly after beginning practice, he was consulted by the parents of a young girl with decided mitral insufficiency. His prognosis was unfavorable. He said the danger was imminent, and but little improvement could be expected. He advised them to prevent all but the quietest movements. Little heed was paid to his advice; the child was allowed unrestrained freedom with other children. Twenty years afterwards Flint saw this girl, now a mature woman, leading an active, useful life.

It is scarcely necessary, to an audience such as this, to say that only exceptionally should prognostic significance be attached to cardiac murmurs, since lesions of the most trivial nature may cause murmurs of the most marked character. It is true that sometimes they afford considerable assistance in judging of the future prospects of particular cases, yet these are exceptional; ordinarily, they should have no place in prognosis.

Treatment.—This includes prevention as well as management of the case after the heart disease has developed. The most effectual means to prevent the cardiac disease is, of course, to prevent the rheumatism which causes it, but we have no remedies to effect this purpose. We can but avoid the causes, preserve the best attainable health, and protect the person against such influences, as cold and wet, as cause rheumatism.

If the rheumatism occur, we are then driven back to preventing the heart becoming involved. To do so, we should arrest the rheumatic process as soon as possible. It is claimed by many capable observers that the alkalies are our best remedies for this purpose, and that if given freely before the heart becomes affected they will prevent that complication. More recently it is claimed that under the salicylates the heart enjoys equal immunity. Being compatible with each other, most physicians try to obtain the good effect of both by combining them. How far either or both these remedies deserve credit for power to prevent this phase of rheumatism is uncertain, but there is no doubt that they have little or no influence over the cardiac disease once that it is established. As further aids in preventing the heart affection we should promote excretion, so as to relieve the system from the irritation of the waste products, and thus relieve the heart also from the increased labor incident to retention of waste in the blood. The purer the blood, the more easily is the circulation maintained.

Then the nutrition should be carefully maintained by the administration of light liquid nutritious food at short intervals, so as to forestall the anæmia that almost always threatens. And the condition of as complete rest as possible should be maintained, so as to relieve the heart of all the strain possible, even in the mildest cases, in children particularly.

Sibson,* in his wide experience, found that while absolute quiet and rest seemed to have little influence in preventing the occurrence of the signs of heart lesions, it had great power over the permanence and increase in those lesions. He found that the signs of heart disease completely disappeared or persisted only in a slight degree in a much larger proportion of those cases who had been kept at rest and carefully tended than in those who were allowed freedom to exert themselves, even though otherwise well cared for. It therefore becomes of the utmost importance that rheumatic persons, especially the young, should be put to bed on the first symptoms, however trivial, showing themselves, and that they should be kept there until so far recovered from the rheumatism and its attendant anæmia as to ensure the safety of the heart, and protect against a relapse of the rheumatism.

In the anæmic and debilitated attacked by rheumatism, it is doubtful if the benefit derived from the alkalies and salicylates, especially the latter, is not more than counterbalanced by their tendency to increase the anæmia, and thus the liability to heart disease. For my own part, I have seen more benefit apparently result from the free administration of iron in these cases, preferably the tincture of the chloride. If salicylates are given to such patients, they should be discontinued as soon as the acute symptoms are overcome, the iron being given from the beginning and continued.

In children in whom, as already pointed out, rheumatism is so seldom acute, there is rarely

* Ibid.

occasion for heroic treatment with salicylates; besides, it is probable that the alkalies are more potent in them in preventing the heart affection. Then the first tendency to anæmia in rheumatic children should be constantly before our minds, and no effort should be spared in counteracting it by every possible means; therefore, great care must be exercised in diet, which should be nutritious and easily assimilated. At the same time care is needed to prevent overfeeding and the risk of a relapse.

The securing of adequate rest is the most difficult part of the treatment of heart disease in children, especially in boys, particularly as the rheumatism is usually so mild. When first seen, the heart is often affected. Many a boy has had his heart irretrievably damaged and his life cut short by being allowed, while subject to latent recurrent attacks of rheumatism, to indulge in the usual games that are healthful to the healthful boy.

Selections.

DIAGNOSTIC AND PROGNOSTIC VALUE OF TUBERCLE BACILLI IN THE SPUTUM.—Dr. F. J. Wethered read a paper before the Medical Society of London on "The Diagnostic and Prognostic Value of Tubercle Bacilli in the Sputum." Since the discovery of the tubercle bacillus in 1882 by Koch, much had been written in regard to the value of a search for this organism. He wished to make a few additions to what had already been published on the aid to diagnosis furnished by the tubercle bacillus from his own experience, and also to comment on its prognostic signification. As to the method of staining, after trial of several methods he had always reverted to the Neelsen-Ziehl process of staining in a carbolic acid solution of fuchsine and decolorizing in a 25 per cent. solution of sulphuric acid. The chief points to which attention should be directed to procure successful results were: To select the early morning sputum; to pick out the small opaque particles; to stain for two minutes in the heated stain; to thoroughly take out the red stain with the acid, a quarter of an hour not being too long, although a minute was usually sufficient; finally, to counter-stain in methylene blue. There were still some medical men who viewed with a considerable amount of scepticism the value which was to be attached to the presence of tubercle bacilli in the sputum; but the various papers which had been published had conclusively proved their true value. Roughly speaking, a positive result—that is to say, their presence—was absolutely diagnostic of a tubercular process going on somewhere in the respiratory tract, but a negative result, their absence, was practically of no value. It was in those cases in which the history and physical signs were not clear enough to warrant a diagnosis of tubercle that a bacteriological examination was of value, especially when phthisis was masked by bronchitis or emphysema. In obscure laryngeal cases it was also of value, as a differential diagnosis from syphilis might thus be established. A negative result did not by any means absolutely exclude phthisis, even though several examinations of the sputa might have been made. As regards prognosis, he had come to the conclusion that little could be learnt from the numbers and distribution of the organisms. The mere fact of their presence naturally increased the gravity of the case, but beyond this he did not think it was safe to go, the general aspect of the case being a surer guide. He had found bacilli to be very few when the disease was progressing rapidly, and to be numerous when the patient was recovering. Examination of unstained specimens would often lend aid, and especially ought the leashes of elastic tissue to be carefully sought for. Dr. Hadley urged the importance of using absolutely clean slides, having found bacilli perfectly stained in slides washed for some days in spirit and potash. The organisms were discoverable in preparations which had been steeped for twenty-four hours in 25 per cent. sulphuric acid. He thought when bacilli were found, specimens of elastic tissue could always be obtained. By the new methods of staining, however, the bacilli were the more easy of discovery. He agreed as to the difficulty of finding bacilli in miliary tubercle, even when squeezing out the actual miliary granules.—*Lancet.*

RESEARCHES ON THE BLOOD IN DISEASE.—Thanks to the more exact methods of estimating the number of corpuscles in the blood and

their richness in hæmoglobin, we are becoming possessed of a large amount of information respecting the variations presented by these elements in physiological and pathological conditions. The most recent contribution to the subject is by Dr. Carl Sadler, whose researches were pursued in the clinic of Prof. von Jaksch at Prague, and the details of which form a supplement to the *Fortschritte der Medicin* (vol. x., No. 4). The monograph contains the results of very numerous observations (made with the Thoma-Zeiss hæmacytometer and the hæmometer of Von Fleischl) in cases of diseases of the blood, pneumonia, pleurisy, pericarditis, peritonitis, acute rheumatism, meningitis, scarlet fever, malaria, typhoid fever, perityphlitis, Weil's disease, puerperal "sepsis," tuberculosis, bronchitis, nephritis, morbus cordis, gastric catarrh and dilatation, carcinoma (of stomach mainly), sarcoma, lymphadenitis, syphilis, cerebral tumor, cirrhosis of liver, and cholera nostras—a lengthy list, covering a wide range of disease. The results are drawn up on a methodical plan, and are well worthy of study in each individual instance; but it must suffice here to cite the chief facts contained in the summary that closes the monograph. In acute diseases Dr. Sadler finds that there is constantly a decrease of red blood corpuscles, but mostly not very marked. In chronic diseases the diminution is greater, especially in such as exhibit cachexia, and there is a proportionate diminution in the amount of hæmoglobin. An exception to this is met with in tuberculosis so long as nutrition is fairly well preserved. Nor does valvular disease of the heart, particularly mitral disease, affect the number of corpuscles. In chlorosis the corpuscles may long remain at the normal standard, whilst the hæmoglobin markedly falls, a confirmation of a well-established fact. In other cases of anæmia, the essential form and those due to losses of blood, atrophy of stomach, and other causes, the decline in corpuscular richness takes place *pari passu* with that of the hæmoglobin. Acute and profuse diarrhœa produces a notable increase in the proportion of corpuscles and hæmoglobin, attributable to inspissation of the blood, and this may account for the apparent maintenance of a fairly normal standard in some cases of typhoid fever. Dr. Sadler found a diminution in the number of white blood corpuscles in malaria, apart from the administration of quinine. Leucocytosis is proved to occur during digestion, and also during the puerperal period and the first days of lactation. Pathological leucocytosis is found in all diseases accompanied by exudation, such as pneumonia and serous inflammation, including acute rheumatism, but not invariably. An explanation of the variation may perhaps be found in the different kinds of exudations that occur; whilst the leucocytosis itself has been explained by the absorption of "nuclein" set free from the disintegration of the exudate. Leucocytosis does not occur in uncomplicated typhoid fever or in tuberculosis (except during the reaction produced by injections of tuberculin). It was present in only one-half of the cases of carcinoma examined, and had relation rather to the supervention of ulceration than to infection of lymphatic glands. Singularly, in contrast to carcinoma, leucocytosis is invariably present in cases of sarcoma, the reason for which is not at present obvious. Dr. Sadler did not find any increase of white corpuscles in cases of tubercular lymphadenitis which had not proceeded to suppuration.—*Lancet.*

PHAGOCYTOSIS.—The discussion at the Pathological Society of London upon the doctrine of phagocytosis in relation to immunity seems to gain in interest and definiteness as it proceeds. The issues are becoming more clearly defined as the arguments for and against the doctrine are evolved. Dr. Bristowe, who spoke first at the meeting last Tuesday, did good service in recalling to the minds of his hearers the accepted facts of clinical observation respecting the infective diseases and the question of protection. He showed how difficult it was to explain the latter on any hypothesis yet advanced. Dr. W. Hunter did his best to reconcile the opposing views of the "phagocytists" and the "humoralists," thus adopting a term which reminds one of the controversies of a bygone pathology, and suggesting that, after all, the root problems of disease remain much the same now as then. Dr. Hunter maintained that the physiological relationship between the cells and the plasma was such as to support the phagocyte position, which had the further merit (not

possessed by "humoralism") of novelty. His illustrations of experiments bearing on chemiotaxis, positive and negative, were criticised by Dr. Martin, who showed that they were inconclusive, owing to the inflammation set up by the sponge introduced beneath the skin. Moreover, Dr. Martin, who was the chief speaker against phagocytosis that evening, adduced weighty reasons for believing that the changes to which immunity is owing take place in the blood and not in the solid tissues. On the other hand, Dr. Wright, whose lucid speech was an admirable contribution to the debate, candidly admitted that he had recently come round to the opinion that the bactericidal power of tissue-fibrinogen (with which he allied Hankin's "alexine") may best be explained by its acting as a cell stimulant. Mr. Adami and Mr. Bokenham also adduced facts tending rather to support the doctrine of immunity by phagocytosis; and altogether it may be said that many of the arguments advanced at the previous meeting were met by the "phagocytists," whose chief exponent, Dr. Ruffer, will open the adjourned discussion at the next meeting of the society.—*Lancet.*

A COLLECTIVE INVESTIGATION REGARDING ANÆSTHETICS.—An exceptionally important inquiry, on a large scale, according to the *British Medical Journal*, is to be made throughout the hospitals of Great Britain, in the year 1892, regarding anæsthetics. Eminent surgeons, anæsthetists, and general practitioners will contribute their clinical experiences, as supplemental to the conflicting results obtained by the experimental workers. The research will be made under the auspices of the British Medical Association. An influential and fairly constituted committee has charge of the plan of the inquiry, and record books have been prepared for use of those who are willing to co-operate. These books have been carefully drawn up so as to secure uniformity on the part of the reporters, and they contain full instructions. Mr. Jonathan Hutchinson heads the committee, and Dr. Childs, of Weymouth, is its secretary. Among the other names of committeemen are those of Lister, Annandale, Buchanan, Chiene, Buxton, Duncan, Hewitt, Macewen, Croly, Butland, and Macleod. The sub-committee for England and Wales is headed by Mr. Pridgin Teale. Similar sub-committees will preside over the work in Scotland and Ireland.—*N. Y. Med. Jour.*

PSORIASIS—A NEUROSIS OF THE SKIN.—Polotebnow, of St. Petersburg, expresses the opinion that psoriasis is nothing more than the result of nervous disturbances of various kinds—in other words, a neurosis of the skin. It is generally stated that patients with psoriasis are otherwise robust and healthy persons; but this is apparently disproved by Polotebnow's observations (28 cases). The extent and appearance of the skin disease is omitted in many, as the chief point of interest lies in the nature of the nervous symptoms. These are severe headache, remarkable neuropathic affections in members of the same family, and the coincidence of the appearance of the eruption with some severe psychical shock, evident clinical abnormalities in the nervous system, diseases of bones and joints, typhus fever, injuries of the head, intemperance, and minor neuropathic symptoms.—*Erganzungsheft der Monatash. f. prakt. Dermatologie*, No. 1, 1891.—*Satellite.*

As puncturing the drum is seldom, if ever, productive of ill effects, Dr. S. MacCuen (*Annals of Ophthalmology and Otology*, January, 1892) considers paracentesis of the drum (even in acute myringitis) not only an essential, but an *imperative duty* in all doubtful cases not promptly yielding to other methods of treatment. Acting on this theory, the writer has had the good fortune of restoring hearing in a number of cases, the loss of hearing being attributed either directly or indirectly to traumatism. An examination of the foreign matter in each case showed it to be *blood clot;* it would therefore appear that loss or impairment of hearing, the result of hemorrhage in the tympanum, is of much more frequent occurrence than has formerly been supposed.—*College and Clinical Record.*

SIR MORELL MACKENZIE was one of the best known and most hated of all the physicians in English society; and although the best known and most hated, he was by a very large circle the best liked of any of the members of his profession. He was a kind-hearted, genial,

courageous man, who built up a great practice and was correspondingly disliked by those whom he had distanced in the race. The professional accusation against him was that he was too much of an advertiser—not in the vulgar method of advertising, but by the more astute arts which are familiar to those who are past-masters in the art of pushing themselves. —*Med. Rec.*

THE
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TORONTO, APRIL 1, 1892.

THE ONTARIO MEDICAL COUNCIL.

We have heard much recently about the Ontario Medical Council, and the evidence brought to view shows conclusively that this very important body, the medical parliament of the province, is not so popular as it ought to be with the mass of the profession. It is somewhat remarkable, in the same connection, to observe the amount of misapprehension and misconception which exist with reference to its functions and work in the past. It came into existence in 1866, and its originators hoped it would do much good in the interests of the profession of Ontario. Before that time, the character of the medical courses given was very unsatisfactory. In certain quarters little or nothing was required for matriculation, and students were rushed through both preliminary and final examinations by easy and rapid stages.

It might be well if the graduates of recent years would carefully consider these facts, and calmly contemplate the possibility of a return to such an order of things. We do not at present intend to discuss in detail the many questions which have been raised lately in the varied discussions; but we desire to state in a general way that, notwithstanding certain imperfections in the Council's methods, which at times have been rather marked, the condition of things medical in the province is infinitely better than it could have become under the old régime.

We have our central examining board, which is the strongest safeguard we can possess against the irregularities and vices of the old "go-as-you-please" system. The Council have shown a commendable desire to make their methods of examining as good as possible, and select the best available men as examiners. In looking back a few years, it will be seen that great advances have been made on these lines. The examining board, as at present constituted, is an admirable one; the examinations are carefully conducted, and are fairly practical.

One of the most important functions of the Council is to prepare a curriculum. Probably the most radical of the Council haters will admit that the efforts to raise the standard were for many years persistent until they were finally crowned with success. We believe that, all things considered, the requirements of the present curriculum are the highest in the English-speaking world. The standard of the preliminary for matriculation is high, probably much higher than the majority of the profession have any idea of. Five years of study are required after matriculating before candidates are allowed to present themselves at the final examination. The various courses of study prescribed involve a large amount of practical work in laboratories and hospitals.

Our Ontario system of managing medical matters by means of a council composed of representatives of the profession and the teaching bodies has been carefully studied by many in Great Britain and the United States, and has generally met with approval. Many States of the Union have lately passed medical acts which closely resemble that of Ontario, though mostly inferior to it in some particulars.

After the smoke and fires of the present battles have to some extent disappeared, we propose to refer to certain matters which have recently been discussed with reference to certain sins of omission and commission which are charged against the Council. Open discussions and fair criticisms are quite in order, and may result in benefit both to the general profession

and our medical parliament; but unreasonable abuse, wild denunciations, and "swearing at large" are unbecoming, and can accomplish no good.

MEDICAL EDUCATION IN ONTARIO.

Dr. Geikie's letter on the above subject is certainly ingenious and rather clever, while its tone is quite respectable, especially when compared with some of his former epistles. The Dean reiterates his charge that Trinity was treated unfairly. This is not correct, as we have shown before. The following quotations from the report of the committee of the Senate will show the desire of that body to deal fairly with Trinity: "If the Faculty or Faculties of the Toronto School of Medicine or Trinity Medical School decide to suspend their charter or charters and accept the proposed scheme, the members of such Faculty or Faculties shall hold, as far as possible, the same positions in the new college as they hold as professors or lecturers in their present schools. The present salaries of professors shall be maintained *pro rata*, and, for the purpose of defining what is understood by salaries, the scale at present existing in Trinity Medical School shall be taken as a basis. . ." Trinity refused, although her Dean intimated to the public that a guarantee of a salary of two thousand dollars to each of her principal lecturers might have some effect.

The Dean declares, in his letter to THE PRACTITIONER, that he entertains a high respect for the Senate of the University of Toronto, which he calls a "learned and highly respectable body of men." In a former letter, however, he speaks of the above proposal, made by this very Senate, as "a mere trap, falling into which would have destroyed the identity of Trinity Medical College." He further adds: "The utter meanness and gross unfairness of such a thing makes one's cheeks tingle as it passes through the mind." In another letter the Dean, in referring to the fact that the Legislature of Ontario gave to the University the sum of $160,000 to aid in restoring the burned building, says: "Yet we find that by far the greater part of the generous legislative gift of $160,000 has been lavishly spent on these dissecting rooms, vat rooms, and other apartments for medical teaching, a mode of spending it which was never authorized, or even dreamt of, by the House which voted the money." As far as we can understand plain English, this is a direct charge of "dishonest misappropriation of public moneys," which is absolutely incorrect in every particular.

As Dr. Geikie has evidently become rather ashamed of some of his former "reckless" and extraordinary statements, we will make no further reference now to many of his letters, which showed poor taste and bad judgment. We agree with him that his school has done good work in the past, and is likely to do the same in the future. We hope that it will never be attacked by men who will use such expressions as "utter meanness and gross unfairness" with reference to the actions of its friends or promoters. In the name of the profession of Ontario, we congratulate Trinity on its record up to the present time, and hope that in the future its career will be honorable in all respects, creditable to its worthy staff, and a source of pride to its many friends.

MEDICAL EDUCATION IN ONTARIO.

An Open Letter to the Attorney-General of Ontario, in reply to a Letter by Sir Daniel Wilson, LL.D., F.R.S.E., etc., to the Minister of Education.

BY WALTER B. GEIKIE,
Dean of Trinity Medical College.

A printed copy of a letter dated Feb. 22nd, 1892, by Sir Daniel Wilson, President of University College, addressed to the Hon. the Minister of Education, in reply to a communication sent by me to you, dated Nov. 3rd, 1891, on the subject of medical education in Ontario, has just been sent to me. The learned writer not only challenges, but entirely misconstrues and sometimes totally misrepresents, perhaps not altogether wilfully, some of the statements in the letter to which he replies. It is, therefore, necessary for me to trouble you once more, in order to prove the substantial correctness of the position taken by me throughout this entire discussion, and to correct the misconstructions and misrepresentations referred to, so that the Government may the sooner be able to reach such a solution of existing difficulties as will be considered satisfactory and fair to all concerned.

I shall not follow the learned President's ex

ample in using strong language of denunciation or depreciation; nor shall I seek to slur the character of any one, whether long since dead or still living. The position taken by those for whom I speak is far too strong to require the adoption of tactics so questionable.

I am greatly surprised that Sir Daniel Wilson, a gentleman occupying a position so distinguished, and who, if spared, as I trust he may be, will soon reach the fourscore limit of human life, should have seen fit to adopt the very opposite course.

The abolition of the former Medical Faculty of the University in 1853 is the matter first alluded to by Sir Daniel. Up to 1853, this Faculty, maintained at the public expense, and the only medical faculty in the province so maintained, was abolished by the old Parliament of Canada, only *two* of the members voting for its retention.

It would be very difficult to find a case of any legislature coming to a more unanimous decision on an educational question. It is easy, however, to explain this all but unanimity of action in view of the sound principle which was then very generally held, and which commends itself *now* to most people of ordinary common sense, "That it is not the duty of the State to use public funds of any kind in educating students for a special profession, such as medicine or law, any more than for any other calling by which people earn their living." The Government organ at the time in Toronto, *The Leader*, of Nov. 22nd, 1852, in an editorial on "Medical Education," clearly explains the view which then prevailed: "When we take our stand on an impregnable principle of political economy and assert that the State is not justified in employing public moneys to produce an article which experience has shown that private enterprise is abundantly able to supply, no one is bold enough to controvert this principle." Also, from the same paper of Oct. 26th, 1852: "There are three medical schools in Toronto. Why continue to sustain one by public money when the facts show that the article you want is supplied by private enterprise?" The learned President, however, with characteristic simplicity and self-confidence, says that he has "no doubt that the abolition of the Medical Faculty was largely due to the antagonism between the late Dr. Rolph and certain professional rivals, the Hon. Dr. Rolph being, at the time of its abolition, a member of the Government." That a Canadian legislature, sitting in Quebec, and composed of members coming from every part of both the old provinces of Canada, could be influenced in any appreciable degree by "antagonism" between Dr. Rolph and certain rival doctors in Toronto, of which alleged "antagonism" the members, with hardly an exception, must have been entirely ignorant, is a suggestion in the last degree absurd. If all Sir Daniel's views on questions pertaining to medical education rest on foundations as flimsy as this, they can hardly be deemed worthy of much attention. Having been, in 1852, engaged in medical practice not far from Toronto, and quite familiar with all the circumstances, I can testify that the decision reached by the Legislature was the result of the sound common-sense policy laid down and acted upon in regard to educating men for lucrative professions, with the cost of which, the members held, *the country should have nothing whatever to do*, and to-day public opinion is on the side of this principle as in 1853.

Sir Daniel Wilson, somewhat obscurely, however, makes a further allusion to the late Hon. Dr. Rolph which, as a matter of good taste, would have been much better omitted. *De mortuis nil nisi bonum* is a familiar adage, which is happily very seldom forgotten.

The allusion is in connection with hints alleged to have been thrown out by him regarding the re-establishment of the Medical Department of Toronto University not long after its abolition.

Dr. Rolph was a man eminent in many ways, and, with reference to this allusion, I have pleasure in doing an act of simple justice to his memory. As one of Dr. Rolph's intimate friends and his colleague in the Medical Department of Victoria College from 1855 to 1870, when he retired from active work, I never heard him say a word on the subject Sir Daniel refers to. During all those years probably no one knew him better or saw more of him than the writer, and he took the greatest interest and talked freely with his friends on every matter connected with medical education. Had this subject been on his mind, he certainly

would have mentioned it. As Dean of the *entirely self-sustaining* Medical Department of Victoria College, which he so ably conducted for many years, Dr. Rolph was satisfied and happy, and greatly beloved by all the students. The medical men he educated are scattered over all Canada, and not a few of them have been, and others are now, worthy members of our several Canadian legislatures, and, with hardly an exception, they cherish and revere his memory.

Everybody unites with the learned President in rejoicing at the advances made in all branches of science. It is most desirable to have every department of science necessary to a thorough *general* education, not only taught, but well taught, in the Provincial University, which exists for the very purpose of affording the highest *general* culture to our youth who fill her halls, so that they may be ornaments to any profession or calling they may subsequently follow. We are proud, too, of our agricultural colleges, as indispensable to a farming province like Ontario. For the more scientific the farming, the better for every man in the province. No one grudges the support given to our Normal and other schools—to the schools of Pedagogy, and of Practical Science and Engineering, so as to provide us with well-educated teachers, surveyors, civil engineers, analysts, and with people skilled in any other departments of science which the country may require for the development of its natural resources, and which unaided private enterprise could not adequately, or perhaps at all, supply, as we have not now, and hitherto we never have had, any such schools or colleges established in Ontario by private enterprise. For such necessary purposes which the country's actual needs call for, by all means let public aid be given, always wisely, yet in no stinted way. Up to this point, but not beyond it, the writer agrees with the learned President.

The people of Ontario are, in their own opinion, quite sufficiently taxed now. In not a few cases, hard-working farmers and others find it just hard enough to make a fair living for themselves and their families. The Province with praiseworthy liberality, places a thoroughly good *general* education within the reach of every young person who cares to have it. This can be carried even to graduation in Arts or Science in our Provincial University, and, in addition, private munificence has stepped in, for recently the Hon. Chancellor Blake gave the princely gift of $20,000 to aid Arts students who are beginning their studies by providing scholarships at matriculation. But to give learned and lucrative professions wholly or even partially at the public cost is quite another thing. There is no such special lack of doctors as to call for or justify our increasing their numbers at the public expense. The profession of medicine, indeed, is now so well filled that many of those educated in all our medical colleges go to the United States and to other countries for a living. Are our farmers and all other people in Ontario willing, or is it right, that they should be taxed to educate doctors to supply other countries than their own? It is hoped that enough has been adduced on this point to show the unreasonableness and manifest injustice, as far as the public is concerned, of continuing to subsidize medical education in the Provincial University. It clearly appears from his letter, however, that the learned President is prepared to go any length in endeavoring, as far as possible, not only to continue, but to extend the evil we complain of. Under all the circumstances of the case it will, we think, be admitted that sufficient reasons have been given in this letter to justify us in the most strenuous and increasing opposition to an unfair use of public funds, which should never have been allowed to have a beginning, for we again assert that this subsidizing of one Medical Faculty is a threefold injustice; unjust to the public, to the Arts Department of the University, and last, but by no means least, to the self-supporting medical colleges, for which, as having chartered them, Government is bound, we respectfully submit, to secure absolute fair play, which is all they ask for. Can there be a more reasonable request? Ontario has shown by forty years of experience that medical colleges can be most efficiently conducted on the entirely self-sustaining principle, providing buildings and everything else they require out of the fees of the students they teach. Should any colleges happen to secure private endowments, this is a matter with which no one has any concern. But, as a rule, those which are entirely

unendowed are said to do better work than others; for as their success depends entirely on the ability, zeal, and assiduity of their professors, these feel necessitated to put forth all the energy they possess, and therefore are believed to do better teaching. It was forty years ago proved, and it is no less decisively proved to-day, that the quality of the professional men educated by a medical faculty maintained in part at the public expense is not a whit better, nor do they take any higher standing, than others do towards whose education not one fraction of public money has been contributed. To-day, and for many years past, the standing of the candidates from the various medical colleges, at the examinations of the several examining boards in Great Britain, and at the examinations of our own Medical Council, which all who intend residing in Ontario have to take, proclaims this with trumpet tongue over the whole land. There can be no better evidence than this of the extreme unwisdom, as well as the gross injustice, of subsidizing, as is now done, one out of the six medical teaching faculties which, including the colleges for women, exist in Ontario. Our people are sensible and shrewd, and quite able to form their own judgment in regard to such matters; and if the future is to be judged of by the past, the injustice complained of will not be allowed to continue long.

Sir Daniel refers with much warmth and in strong language to my reference to the legislative grant of $160,000 given to the University after the fire. He speaks of my "making to the Attorney-General a charge against the authorities of the University (page 4 and page 6), of my letter having been forwarded to him by the Hon. the Minister of Education, with the request for a reply to its grave charges, including that of fraudulent misappropriation of public funds obtained on false pretences." I never made any such charge, and never used or wrote any such words as are here attributed to me. Had Sir Daniel been a younger man, I would with utmost indignation have thrown back these words upon him. I content myself with entirely repudiating the idea he disingenuously seeks to convey to those who only see the few extracts he has garbled from my letter, with which even he appears to have deceived himself. Such a thought as the "fraudulent misappropriation of public funds obtained on false pretences" on the part of the "authorities of the University" never once entered my mind, nor has any one of the many who have spoken to me on the subject ever hinted at such an inference as that which Sir Daniel has drawn from my letter. I greatly respect the Senate and the Professors of Toronto University, and would as soon think of charging the Premier of Great Britain with till-tapping as of doing what Sir Daniel Wilson's letter indicates. What I meant was this—and a careful reading of Sir Daniel's many admissions in his letter, and a knowledge of much to which he either does not refer at all, or passes over very lightly, has only intensified my conviction of its truth—that the Legislature of Ontario which voted the $160,000 referred to had not the remotest idea, any more than the members of the Government themselves, that a very large sum, equivalent to a considerable and possibly the greater proportion of the amount granted would be spent in erecting buildings largely for medical teaching purposes, and it appears to me incredible that it should be so spent in this way, which, it is admitted, neither the Legislature nor the Government for one moment either intended or anticipated. I refer, of course, to the large expenditure for dissecting-rooms, vat-rooms, etc., for the study of human anatomy, and for other class rooms used for medical education in this one college, while all other medical colleges in the province provide everything of this kind wholly at their own expense. And I have reason to know that an influential section of the University Senate takes the same view of this matter. I know also that however large the amount which has been spent in what I regard as the unjust and unwise way objected to, and which was all public money quite as much as the grant—even if it had exceeded the amount of the grant, it would have been raised somehow or other, and the entire $160,000, that is, the whole grant, as a matter of course, applied to the special purpose for which it was voted. Everybody at all acquainted with the financial affairs of Toronto University at the present time is aware that the amount of money already spent on these buildings has seriously crippled the University

and prevents the possibility of some departments, however urgent their needs, having their due share of money spent upon them. From Sir Daniel Wilson's letter it might be gathered that the Medical and Biological Departments constitute almost the entire University. This is, however, by no means the case. Yet from the lavish way in which money has been spent on these, and the warm justification of this expenditure by the learned President, and his proved willingness to increase it, one cannot help thinking that he considers it the right thing to do, although the inevitable result of this policy is to leave some important departments largely unaided to struggle along as best they can. Is this policy not likely in the near future to prove injurious to the best interests and usefulness of the University?

The President seeks to throw doubts on my statements as to the Biological buildings being used to any great extent, or having been intended largely for medical teaching purposes. He seeks to befog his readers by quoting the number of square feet contained in the buildings, etc. This the President parades as facts, but they have very little bearing, indeed, on *facts* of another kind taken from the official calendar of the University of Toronto Medical Faculty for 1890-91, in which there is a full page-sized cut of the main part of the Biological building (facing page 28), while on page 27 is the following: "The teaching in this department will follow closely the requirements of the College of Physicians and Surgeons, and will, in addition, comply with the regulations of the University of Toronto" (that is, in medicine).

"The fourth session since the re-establishment of the Medical Faculty of the University will commence on Wednesday, Oct. 1st, 1890, when the opening lecture will be delivered in the *Biological laboratory*" (page 19). On this occasion, Oct. 1st, 1890, Sir Daniel Wilson, LL.D., etc., is reported in the Toronto *World* of Oct. 2nd, 1890, to have said that "Toronto University had spent some $130,000 on these magnificent buildings to give medical students the best equipped school in Europe or America." Why did the President not refer to this speech in his letter? He should have quoted it.

The Official Calendar of the University Medical Faculty for 1891-92 has the following paragraph:

"UNIVERSITY OF TORONTO MEDICAL FACULTY.—The fifth session since the re-establishment of the Medical Faculty of the University of Toronto will commence on Thursday, Oct. 1st, 1891, when the opening lecture will be delivered in the *Biological laboratory*."

"The lectures and demonstrations in the subjects of the first and second years will be given in the *Biological laboratory* and in the *lecture rooms of the University*."

This last paragraph means that *two* sessions of medical teaching work out of the *four* required—that is, exactly one-half of *the medical course*—is done in buildings erected at the public cost. After trying, notwithstanding his full knowledge of this being the case, to show how little the new buildings are used for medical teaching, and saying, although they contain dissecting-rooms, bone-rooms, vat-rooms, etc., that they would have been built all the same had no Medical Faculty existed, he virtually admits that his contention is incorrect, because compelled to do so, for on page 6 he says: "And in so far as certain portions of the building are set apart for the Medical Faculty, a report was obtained from the architect specifying their estimated cost, and on the basis thus furnished an annual rent of $1,200 is charged to the Medical Faculty, in accordance with the report of a joint committee of the Board of Trustees and the Senate, as what, in their estimation, 'would be a just and adequate allowance' as interest at four per cent. on the cost of erection." (See recent Finance Report of University Committee.) It is said that this decision to charge rent was only recently reached, and was not contemplated by the promoters of the medical part of the building. This $1,200 looks well and fair on paper, but in reality it is not in any sense an adequate return for the great cost, as well as the deterioration in the value of the property. To understand this last point clearly it has to be borne in mind that dissecting-rooms, vat-rooms, and others where human anatomy is taught and studied for at least six months of each year, now form part of this fine pile of buildings. The parts of the building actually used for this work must necessarily have a very strong and—even to many medical

men and students—a most unpleasant smell. This is so all-pervading that it creates a dissecting-room atmosphere far and near, so as to make even a large building more or less unpleasant from the basement to the roof. This smell it is impossible entirely to get rid of. With care, it may be lessened in some degree; yet, do what you will, the air in adjoining apartments will often be found so unpleasantly tainted as to be positively sickening to a great many persons. I have already heard of a good many complaints by University Arts students on this very ground, some saying to me that "the smell was simply abominable." Indeed, so long as dissecting is carried on at all, or bodies kept in vat-rooms in any building, this hateful odor will inevitably continue. It is said that the plans for the dissecting and vat-rooms and the rest of the "Medical Faculty" portion of the building was never submitted to the Senate. Is this the fact or not? Sir Daniel Wilson tries to show how little room the medical students occupy in the Biological department, but every one says there are a great many more of them (said to be fully two to one—see University Class List for 1891) than there are of Arts students who are taking the Science course. I can venture the opinion quite safely that, let dissecting go on and the regular courses on anatomy continue to be given in the building as at the present time, and before long no one will be found willing to occupy, either as a teacher or student, any of the lecture or other rooms near enough the anatomical region to be more or less smell-stricken unless those who are either teaching or studying human anatomy. It will soon all be left for the medicals. How far will the $1,200 to be charged for rent go in meeting the interest on the cost of those extensive portions of the building thus rendered comparatively useless? Twice $1,200 would not do it. Besides this, is it fair to have any Arts professors, or Arts students, male or female, subjected to this unbearable unpleasantness? Under existing circumstances non-medical students—even ladies—have, against their wish, seen what they would gladly have avoided seeing, and some have suffered more or less from contaminated air who did not expect this sort of thing when they entered on their studies. Having been a medical teacher nearly all my life, I speak from experience. In Trinity Medical College we suffered much, some years ago, from the air of our entire building being more or less tainted in this way, no matter what might be done to prevent it. For the sake of professors and students alike, the Faculty, as soon as possible, but *entirely at their own cost*, erected the admirable building now in use for anatomical work, which is completely isolated, and ever since we have had no discomfort. But there is another pertinent question. With the regular increase in her own Arts classes and the advent of the Victoria Arts students in the coming fall, will every nook of space in the entire building available for teaching not be required for purely Arts and general Science purposes?

Sir Daniel Wilson thinks it quite right that the State should pay a large share of the cost of medical education, including building dissecting-rooms, etc. Not long since he was a member of a committee of the Senate, indeed, he seconded the motion defining its duties, viz., "To urge upon the Government the propriety of constituting Anatomy, Pathology, and Sanitary Science a part of the work of the University, and to assist the University in providing the requisite means." This resolution appeared in the *Globe* of May 11th, 1891. It simply meant, in addition to all the already great outlay on buildings, the establishing of three State paid professorships in medicine. The project was vigorously protested against at once, and, fortunately, came to nothing, and the committee was discharged. The Hon. the Chancellor and other influential members of the Senate were known to entirely disapprove of it; yet, as an illustration of the pertinacity with which the idea of getting all that can be got from the public purse is clung to, certain speakers of the same way of thinking as Sir Daniel, at a University public gathering not very long since, referred to further action in this matter as being "merely postponed" on account of the losses caused by the late fire, thus foreshadowing their intention in due time of pressing this preposterous claim on the Government.

In my letter, certain fees paid by the medical students in the first and second years were spoken of. Sir Daniel thus refers to this point: "Under a University statute confirmed by the Lieutenant-Governor in Council, all fees paid

by medical students are apportioned to the Medical Faculty." In the interpretation of this statute, fees paid by students for Physiology, Chemistry, and Biology have been so apportioned. Here I would very specially ask, under whose interpretation of the statute was this done—that of the Attorney-General, or the Minister of Education, or the Chancellor of the University? The aggregate amount of the fees thus earned entirely by professors and teachers, paid by the University, or from other public funds (a small portion of it being earned in the School of Practical Science), is no trifling sum, being $34 from every first year's student, and $37 for every student in the second year. Allowing sixty students in each of these years, the total amount would be $4,260.

According to ordinary business principles, this money should go, without any deduction, towards the payment of the salaries of the teachers who give the instruction.

This would make just so much more public money available for the many purposes where it is so much needed, especially in the Arts department of the University. Sir Daniel Wilson himself, however, after making certain deductions from these fees, for one purpose or another, admits that those for Chemistry (general) and Physiology do go into the medical fund; this amounts to $24 per student in the first and second years respectively. Sixty students in each year will give 120 × 24: $2,880. This sum is earned wholly by University-paid Arts professors, and clearly, therefore, belongs to the Arts department. It would go a long way towards paying the small salaries given to assistant teachers in many of the Arts departments where extra teaching is much needed but cannot be had, to the extent required by the students, from want of funds. In the self-sustaining colleges all the teaching is done in every subject by the professors, who are paid out of the fees they earn, and all expenses are also paid out of these fees. Sir Daniel himself admits that some "readjustment of some of the arrangements heretofore adopted in reference to the special medical fund may commend itself to your judgment under present circumstances is possible."

Sir Daniel passes over without the slightest notice the self-evident injustice of subsidizing one medical college at the public expense, and tacking it on to the Provincial University as its Medical Faculty, thus bringing it into unfair competition with the other FIVE which are altogether self-sustaining. Nor does Sir Daniel allude to the fact stated in my letter, that the work done in the latter institutions has been proved year after year for many years, before competent medical boards at home and abroad, to be as good as any done in Canada. This is absolutely undeniable. The restoration of a Medical Faculty to the Provincial University has been proved once more to be a very great and quite an unnecessary expense to the University and the country. One disastrous result has been to de-provincialize the University in Medicine, making her not a friendly co-worker with all our medical colleges, as from her provincial character she should be, but bringing her down to the undignified and unprovincial position of being a keen and a most unfair, because a subsidized, competitor with every one of them for each student; and this notwithstanding the fact that some of these colleges—our own, for example—have been for many years affiliated with her under their respective charters. The President sees fit to drag Medical Council matters, too, into his letter. What have these to do with the question of the unfair public subsidizing of medical education in one college out of six? The gentlemen to whom the speaker in the Medical Council refers, quoted by Sir Daniel, are amongst the best friends of that body, and are excellent judges as to what is its wisest and best policy. All they desired was to have time given for the careful consideration of every step when great changes are being made, so as to avoid the taking of even one false step which might create trouble and possibly have to be retraced. The President also refers to Trinity Medical College having been asked five years ago to join in the information of the restored Medical Faculty. There is no use bringing this question up now, as at present it has no bearing whatever on the matter in hand. One objection to her doing so, which is unanswerable, is stated in my letter, that "medical colleges, large enough to require the services of a complete staff of professors and other teachers, can no more be rolled together than can large

congregations or public schools." Besides this, Sir Daniel knows very well that the scheme submitted in 1887 to Trinity Medical College and the agreement subsequently made by the University with the Toronto School of Medicine were very materially different. The learned President, too, thinks it a good plan, as in Edinburgh, to have many hundred of students attend the same classes. This necessitates the employment of a perfect army of grinders, causing a large additional expenditure to each student. Besides, professors who can keep up the attention and profitably teach classes of several hundreds are few and far between, either in Canada or elsewhere. As a practical medical teacher, I much prefer the London plan of self-supporting medical schools, with large, yet not too large, classes, as better both for professors and students. Once more, I am surprised that the President should have stooped to refer to a matter long since fully answered, but to which he calls even special attention. This is the closing paragraph of an old letter of mine, dated March, 1887; the President should have said, but he did not do so: that this entire letter was written for the very purpose of showing how "unwise" and "undesirable" it would be to restore a Medical Faculty to Toronto University; that to do so would reduce the University, so far as medicine was concerned, from her provincial position as a centre round which all the medical colleges might cluster, each sending up a quota of students every year, to that of a mere local college competing keenly for students. In the light of to-day, does this not seem somewhat prophetic? The only part of this letter Sir Daniel quotes is the very end: "I think it will be ample time to give the subject full consideration when we learn that the Government of Ontario, with the cordial support of our Provincial Legislature, has fully decided to create, equip, and endow liberally a new medical teaching body; and to provide for it a staff of the best teachers the country can furnish, each of whom shall have a salary secured to him of not less than $2,000 a year for each of the principal chairs, and a suitable retiring allowance when, from age or ill-health, he is no longer able to discharge his duties. Till this is done the project is a mere 'castle in the air.'"

This letter ended as it did only because on indubitable authority I was informed, and then believed, that the "conditions" presupposed by me, of "endowing and equipping," the giving of salaries and retiring allowance, etc., were just as likely to occur as would be the appointment of Sir Daniel Wilson as Admiral in Chief of Her Majesty's Navy, or the extension of the Toronto Street Railway to the moon, and no more so. The old letter is filled with all sorts of reasons showing that matters had much better be left as they were, and that the proposed scheme would be very unlikely to work well, and that the carrying of it out bristled with many real and most practical difficulties. Has this not proved to be the case?

In answering my letter, Sir Daniel has left entirely out of sight its principal feature, viz., the huge injustice and impolicy of subsidizing with public funds *one*, and *only one*, of our six medical colleges. Yet this is one of the main points of the whole discussion; not only so, but he defends all the outlay of public funds connected with this injustice, and has shown himself ready, and even anxious, to increase it, and he never so much as mentions the crippling effect of the recent unprecedented expenditure on the other departments of the University.

In the absence of sound, and often of any, arguments against my contention, he has resorted to all sorts of detraction, and has, as I have already said, put into my letter, as used by me against the authorities of the University, words I never wrote or spoke, and thoughts that never once entered into my mind. Whether the words I allude to are Sir Daniel's own, or merely quoted from a letter addressed to him, and endorsed by him, or not, I do not know; but in either case they are, to use the mildest word possible, entirely and most mischievously incorrect and misrepresenting. He has dragged all sorts of subjects into this discussion which have nothing more to do with it than the fixed stars.

In this reply, much longer than I could have wished, I have striven to confine myself closely to the subject under consideration. I close by sincerely hoping that very soon a settlement of this question, *just* to all concerned, may be reached by the Government.

Toronto, March 10th, 1892.

Meeting of Medical Societies.

PATHOLOGICAL SOCIETY OF TORONTO.

January 30th, 1892.

The society met in the Biological Department, the president, Dr. J. E. Graham, in the chair.

Dr. J. E. Graham presented a specimen, and read the following history:

A CASE OF SUB-DIAPHRAGMATIC ABSCESS ACCOMPANIED BY EXTREME DILATATION OF THE STOMACH.

Notes taken December 30th, 1891.

G. W., aged thirty-five, a builder, has never been strong, suffered for the last six or eight years from dyspepsia, which was at times so aggravated that he could only take limited amounts of the simplest kinds of food. During the past summer he suffered from a pain, more or less continuous, in the right side, and was treated for liver trouble. In the autumn he spent some weeks in Muskoka, but returned very little benefited in health. He was pale and emaciated, and the dyspeptic symptoms were worse than usual. In November he was much startled by a fire which occurred in his house; he exerted himself more than he had done for months in putting out the fire, and immediately afterwards was seized with a severe pain in the right hypochondriac region, accompanied by very great weakness. He was seen by a physician, who found him in a partial state of collapse. Under treatment the pain was relieved, and he rallied considerably. He was, however, much troubled by severe vomiting of a blackish liquid. This vomiting occurred both after taking food and in the intervals. It was not accompanied by pain, and was at times so severe that the fluid would be discharged with considerable force.

Three weeks after the first, he was seized with a second attack of severe pain and collapse. This occurred on a Sunday, and on the following Monday evening Dr. Cameron and I were called to see him in consultation with his attending physician, Dr. Shaw. We found the patient sitting up in bed, pale and much emaciated. He could speak clearly, but his voice was weak. His pulse was 140, and temperature 101°. Upon physical examination, the stomach was found to be enormously distended. The greater curvature was half way between the umbilicus and the pubes. A large solid mass was found in front of the stomach, which we diagnosed to be liver; stomach tympanites was found both above and below the mass. The lower margin of the mass extended down to the umbilicus. At the same time we noticed that the pulmonary resonance on the right side behind did not extend lower than normal. The heart and lungs were found healthy. The diagnosis made was stenosis of the pylorus and dilatation of the stomach. We did not attempt to account for the peculiar position of the liver, except that it was probably much enlarged.

The patient died suddenly the following morning. A *post mortem* was made eight hours after death. Upon opening the abdomen we found extreme dilatation of the stomach, and the liver, normal in size, lying in front of it. The greater curvature passed in a line rather below midway between the umbilicus and and pubes. The liver appeared to be somewhat rotated and pushed downwards, so that the left lobe was in front and below. In trying to separate the liver from the diaphragm, a large abscess was opened, which was found to contain two pints and a half of pus. The abscess cavity extended backwards and upwards, pushing up the diaphragm. Its upper margin corresponded with the fifth rib on anterior border of axilla, sixth rib at post border, and eighth behind. The cavity was not connected with the liver. The sac was thick and strong. It covered a portion of the upper surface of the liver and lower surface of the diaphragm. In the region of the pylorus and abdomen inflammatory adhesions existed, matting the intestines together in a confused mass. Upon examination of the pylorus a contraction was found produced by inflammatory adhesions, but no hardness or ulceration was discovered in the wall itself. The abscess could have been easily reached between the ribs, and could have been thoroughly drained. It is probable that the patient had for months a dilated stomach, the result of dyspepsia, but the extreme dilatation may have been of later origin.

These cases of sub-diaphragmatic abscesses unconnected with the liver are somewhat rare. I have seen two cases, in one of which a diag-

nosis was made by Dr. Cochrane, then a resident physician in the hospital. In the other, no diagnosis had been made. In this case there was no history of injury, nor was there any history of a ruptured cyst. Moxon gives the latter as sometimes the cause. The diagnosis of such an obscure case can only be correctly made by an accurate examination of all the organs, of the careful and thoughtful consideration of all the evidence obtained, and by the use of an exploring trocar.

Dr. Scadding had seen this patient on two or occasions, first in July, 1890, when he had diagnosed perihepatitis. He then had an elevated temperature, constipation, and jaundice. He thought his symptoms were due to a chill while bathing.

Dr. W. J. Greig had also seen him last November, and found his temperature 100° F. and pulse 90. He suspected perityphlitis. There was no abdominal distension; resonance was present on the left side, and dulness on the right; there was forcible vomiting of a black material, and a good deal of gastric flatulence. He had been taking capsules containing carbolic acid, which would, perhaps, account for the black vomit.

Dr. John Caven said this looked like a pyæmic abscess. As in man, at any rate, suppuration never takes place unless micro-organisms are present, there must have been some channel for germ infection—perhaps some lesion of the stomach wall, or of the retroperitoneal glands. There must have been an infective focus somewhere. There may be pus without micro-organisms, but it is only rarely and with much difficulty produced as the result of experiment. The dense wall of the abscess would show that it had been in existence for a long time.

Dr. Primrose asked how the gastric dilatation was to be accounted for.

Dr. Peters said: Might not the stomach dilate from peristalsis taking place when the organ was filled?

Dr. Graham replied that he did not think the healthy stomach would dilate from being filled, and peristalsis then take place, but would hypertrophy. It would be otherwise, however, with a stomach the walls of which were in an unhealthy condition. Sub-diaphragmatic abscesses were very difficult of diagnosis. He had seen only two cases before this one, one of which had been accurately diagnosed by Dr. Cochrane when an assistant in the General Hospital.

CEREBRAL HEMORRHAGE.

A case of cerebral hemorrhage, reported by Dr. Barnhart, was presented by Dr. Graham.

G. T., aged forty-four, had always enjoyed good health. He, however, had met with a serious accident when twenty-six years of age, on account of which his leg was amputated in the middle third.

On the afternoon of November 4th, while returning from Little York with a load of lumber, his horses were frightened by some unusual noise and ran away, overturning the wagon, and throwing him to the ground with the lumber. Dr. Walters was quickly summoned, and found him in an unconscious condition, but with no visible injuries except a fracture of the tibia. He put the leg up in temporary splints, and sent the patient to the hospital.

The accident occurred at 5:30 p.m., and the patient was brought to the hospital at 6:45 the same evening. The fractured limb was dressed, and the patient put into bed. There was no sign of injury to the head. The patient was unconscious and utterly helpless: temperature 101; face slightly flushed, hot and moist; pulse rapid but regular, 140 per minute; heart sounds distinct. Both upper and lower extremities were affected with slight spasms, which varied somewhat at different times from greater to lesser degrees of rigidity. The neck was flaccid, the cheeks relaxed, but the jaws were rigidly closed. There appeared to be a condition of hyperalgesia and hyperæsthesia, as the patient would show signs of distress when the catheter was introduced into the bladder, or when the supra-orbital nerve was pressed upon. The conjunctival reflex, at first absent, returned in a few hours after admission. The pupils were very sluggish and slightly unequal, the right being the larger. The breathing was stertorous, the cheeks puffed out at each expiration. After eight or ten hours, Cheyne-Stokes breathing gradually developed in its most typical form. The progress of the case was marked by a great rise of temperature; 103°, 106°, and 107° were registered in the first twenty-four hours, and Dr. Barnhart is of opinion that it

may have reached 110° or 112° during the night. The pulse became, in a few hours, full and bounding and very rapid—160 to 180 per minute. Mild convulsions, described by the attendants as attacks of trembling, occurred quite frequently during the first thirty-six or forty hours. These gradually became less, so that the body was quite relaxed for a few hours before death.

The patient gradually sank more deeply into coma, and died at 9:30 p.m., November 6th—fifty-two hours after the accident.

Autopsy five hours after death. Abdominal viscera, normal; heart also normal; lungs exhibited signs of commencing broncho-pneumonia; cervical vertebra intact. When the skull cap was removed, the meninges seemed to be much engorged. A clot of blood was diffused over the cortex in the motor area, mostly on the right side, but to a less extent on the left. A clot was also found in the base of the brain in front of the pons. On section small hemorrhages, varying in size from a pin-head to a pea, were found in the brain substance, about an inch below the cortex, near the motor area. Small coagula were also found near the base, implicating the basal ganglia. The pons and medulla were carefully examined, and no gross lesions were found.

This case is a good example of the severest form of concussion, as that accompanied by hemorrhages in various parts of the brain substance. A point of interest was the great rise of the temperature. This was not explained by any of the gross lesions found. It is possible, however, if the pons and medulla had been examined microscopically, some pathological condition might have been discovered which would have cleared up the difficulty.

Dr. Acheson asked, if the patient had lived long enough, would these extravasations of blood have resulted in abscesses? Is it possible to have a purely traumatic cerebral abscess where there is no channel of communication with the exterior of the skull through which pus-producing organisms could enter? If they enter by means of the circulation, are the resulting abscesses not rather pyæmic?

Dr. John Caven said the rise of temperature in this case was an interesting point. Pyrexia is nearly always produced by the absorption of some pyrogenous substance. Here, however, there must have been a hemorrhage into the the pons, or higher up, so as to cut off the inhibitory fibres to the heat regulating centre.

GLIOMA OF THE BRAIN.

In the absence of Dr. Olmsted, who was to have given the description and history of this specimen, Dr. H. W. Aikens gave the following abstract:

The patient had consulted him some weeks before death for an intense pain in the head. He had given him 15 grains of antipyrin, and the pain had ceased temporarily, but it returned persistently. He was more or less somnolent, but there was no other physical or mental disturbance. Later, there was some little inco-ordination of movement in the left arm, and slight loss of power in the left leg. The autopsy showed the outer two-thirds of the lenticular nucleus of the right side to be occupied by a tumor. There was some surrounding cerebritis, and more fluid than normal in the ventricles. The convolutions of the right side were somewhat flattened. The internal capsule was not at all affected.

Dr. John Caven had made a microscopical examination of the tumor, and found it to be in some parts of the character of a pure glioma, and in other parts a spindle-celled sarcoma.

Dr. Primrose read the following notes of a case of

TOTAL CRANIO-RACHISCHISIS WITH ENCEPHALOCELE.

The malformation exhibited depends on an arrest in development in the bones of the head and spine. The vault of the cranium is not completely closed in. The frontals, parietals, temporals, and occipitals are all imperfectly developed; probably the parietals are entirely absent, as also is the tabular portion of the occipital bone. The neural arches of the vertebræ in the cervical, dorsal, and upper lumbar regions are undeveloped, and the neural canal is left unclosed. A shallow flattened groove exists along the dorsal aspect of the vertebral bodies, and in this groove lies a thin membranous structure which represents the spinal dura mater. The skin covering stops short at the tips of the transverse processes, so that the posterior aspect of the transverse processes and

of the bodies of the vertebræ is quite on the surface, uncovered by integument. The skin covering of the cranium is also incomplete, and terminates at the margins of the opening through the vault of the skull; the hair of the scalp is continued down on either side, forming a narrow bordering of hair along the skin margin as low down as the second dorsal vertebra. The membranes of the brain protrude and form an encephalocele as large as a small orange. This encephalocele had been ruptured during labor, and any fluid there might have been evacuated. On opening the brain membranes, contents of brain-detritus are found. On opening the spinal membranes, there is no evidence of the cord, save some nerve roots which lie in contact with the inner aspect of the membrane in the cervical and upper dorsal regions. The condition of the cord would seem to indicate that there had been a myelocele, with a subsequent atrophy of the spinal cord. There is a small sacral tuft of hair over the mid-sacral region. The sacral and lower lumbar vertebræ are apparently fully developed, and the skin over them normal, with the exception of the sacral hair-tuft referred to. He proposed to make a complete dissection of the specimen and report at a future meeting.

Dr. R. A. Reeve presented a specimen of

INTRA-OCULAR TUMOR FOLLOWING TRAUMA.

G. C., aged twenty-eight, a healthy subject, consulted me on the 28th of April, 1891. About a month previously he had received a blow on the right eye. This was followed by congestion and aching, which lasted several days. There was no defect of vision, at least sufficient to command attention, until three days before his visit. Detachment of the retina was found in the inferior equatorial region. V = 20/LXX.

Oct. 5. The patient returned suffering from acute secondary glaucoma.

Nov. 12. Two iridectomies having failed to relieve the glaucomatous condition, the globe being blind, hard, and painful, enucleation was done. Examination showed what had been predicted—the presence of a tumor. This was of greyish appearance and of rather firm texture, and was implanted on the sclero in the equatorial region over an area of about 10 by 8 millimeters. It occupied about one-sixth of the vitreous chamber, the ciliary and papillary regions not being involved. Dr. John Caven had found the growth to be spindle-celled sarcoma. Although the irritative or traumatic origin of such growths has been questioned by good authorities, in a recent series of 103 cases (Lawford) 6.79 per cent. followed trauma. If we bear in mind that the average age of the subject in 362 cases was forty six years, and that the duration of the first, or quiescent stage, as it is termed, namely, six months, in this instance was less than one-third of the average, it seems fair here to ascribe a distinct influence to trauma.

Dr. John Caven had examined the tumor microscopically, and said it was a spindle-celled sarcoma, with slight pigmentation towards the border.

CARD SPECIMENS.

Dr. John Caven presented:

(1) Heart, mitral lesion, thickening of the valve with buttonhole orifice.

(2) Heart, mitral lesion, no stenosis, but chordæ tendineæ glued together so as to prevent proper closure of the valve; also acute pericarditis.

Dr. Primrose presented: Fracture of neck of femur, impacted.

The society then adjourned.

Correspondence.

MEDICAL EDUCATION IN ONTARIO.

Editor of THE CANADIAN PRACTITIONER:

SIR,—Your journal of the 16th inst. contains a letter written by Sir Daniel Wilson, LL.D., F.R.S.E., etc., President of the University of Toronto, to the Hon. the Minister of Education, in reply to a communication made by me some time ago (Nov., 1891) to the Hon. the Attorney-General of Ontario. Sir Daniel's letter has been answered, and I herewith send you a copy of the answer. As you published Sir Daniel's letter in full, I ask, as a matter of simple justice, that you will also publish my reply to it in full. As to the personalities you think proper to use in your editorial article on the subject of Sir Daniel's letter, I do not care to notice them. The reply I ask you to publish contains a complete answer to the only point you seek to bring

against me in your editorial, where you accuse me of charging the Senate of the University of Toronto with the "dishonest misappropriation of public moneys." I never used the term "dishonest" either in speech or in writing in this connection, any more than I used the phrase, "fraudulent misappropriation of public moneys obtained on false pretences," which occurs in Sir Daniel Wilson's letter as having been used by me in reference to the same learned and highly respectable body of gentlemen. As stated in my letter, it is quite immaterial whether this phrase is Sir Daniel's own or merely quoted by him; in either case it is absolutely and most mischievously incorrect and misrepresenting, as no such words were employed by me, nor did even one thought such as they imply enter my mind. The important matter under discussion is in no sense a personal one, nor even one between two or more medical colleges. As you very well know, it is a question of principle, in which the public, the University of Toronto as a whole, and all our independent medical colleges are very deeply interested. This principle is clearly laid down in every letter I have written on the subject: that with *six* medical colleges in Ontario, it is not fair that any *one* of the *six* should be directly or indirectly subsidized from the public funds of the province, while the other *five*, all doing equally good work, are neither asking nor receiving in buildings or in any other way one cent of public money. You say I am seeking to destroy a "sister institution." In this you are entirely mistaken; I wish to do nothing of the kind. But no "sister institution" has any right to have public funds, and, least of all, those which are much needed for other purposes spent on medical buildings for its own special use, while all the other "sisters" (*i.e.*, similar institutions) provide everything they need of the kind for themselves. My motto is, always has been, and will continue to be, "a fair field" for every medical college in Ontario, and no special favors for any *one* of them, particularly if these favors, whether small or great, come out of the public purse. I have only to add that no feeling other than of the greatest kindliness towards every university, university senate, and medical college in Ontario has any place in my breast. Indeed, I am ever, and most gladly, ready to help every one of them to secure every public right and privilege which I claim for my own college.

Faithfully yours,

Holyrood Villa, WALTER B. GEIKIE.
52 Maitland St., Mar. 24, 1892.

Book Reviews.

The Principles and Practice of Medicine; designed for the use of practitioners and students of medicine. By Wm. Osler, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine in the Johns Hopkins University, and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore; formerly Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. New York: D. Appleton and Company, 1892. Toronto: Geo. N. Morang, 170 Yonge Street.

The reader cannot but feel favorably disposed towards an author who has the courage to do away with the time-honored, but useless, preface and the introductory disquisition on the principles of medicine. This favorable impression is increased by such frank confessions as, "I have repeatedly sent cases to the wards as typhoid fever which subsequently proved to be ordinary malarial remittent." Surely the good influence of William Arthur Johnson, priest of the parish of Weston, to whom the work is dedicated, still lives. Would that all medical writers were as frank and truthful! This frankness is not only engaging, but also valuable. Dr. Osler tells us what he has found to be of use; what he has tried, but seen fail; and what he has no personal knowledge of, though it has been recommended by others.

But few works on medicine bear so strongly the impress of their author. "The pulse in typhoid fever presents no special characters. It is increased in rapidity in proportion to the height of the fever. As a rule, in the first week it is above 100, full in volume, and often dicrotic. There is no acute disease with which, in the early stage, a dicrotic pulse is so frequently associated. Even with high fever, the pulse may not be greatly accelerated. As the disease progresses, the pulse becomes more rapid, feebler, and small. In the extreme prostration of severe cases it may reach 150 or more, and is a mere undulation—the so-called

running pulse. The lowered arterial pressure is manifest in the dusky lividity of the skin and coldness of the hands and feet."

One can see Prof. Osler hesitate for a moment between each sentence, change his position, bend forward, and uneasily rub his head. Short sharp sentences—each fact arrayed in Puritan simplicity—follow one upon the other. When all the main truths have been formulated, the modifying statements are given. No one but a teacher would adopt such a style.

Is the Appleton Company bankrupt in colons and semicolons, or has Prof. Osler an innate dislike to their use? Page follows page, beautified by many full stops, and an errant comma, but a colon—never!

The happy union in Prof. Osler of scientific knowledge and its application to practical medicine is mirrored in this text-book. The latest advances in pure science are made to clear up many heretofore obscure subjects. The empirical, if retained, is acknowledged as such, and not surrounded by a halo of obscure mysticism. He who advises routine treatment comes in for no gentle criticism. "The routine administration of turpentine in all cases of typhoid fever is a useless practice; for the perpetuation of which, in this generation, H. C. Wood is largely responsible." (p. 37).

At the risk of a *tu quoque*, we would draw attention to the code of ethics of the Society upon the Stanislaus.

> "But first I would remark that it is not a proper plan
> For any scientific gent to whale his fellow-man;
> And if a member don't agree with his peculiar whim,
> To lay for that same member for to 'put a head' on him."

Here and there crop up signs of the haste with which the book has been written. "Agents which are believed to dissolve the membrane are lactic acid, which may be employed with lime water (two drachms to six ounces) and trypsin (thirty grains to the ounce).

"Pepsin has also been used, and the vegetable pepsin which may be mixed with water and glycerin." (p. 110).

This second paragraph seems to have been an afterthought. Evidently the author could not think of the technical name for vegetable pepsin, but determined to look it up later on, and forgot to do so.

"Thus in the extensive records collected by Welch ulcer, cicatrized or open, was present" (p. 368). What has poor Welch done to be treated thus? Is he not a member of the "Union"?

As an expression of "credo," and as written from the standpoint of an American, this work marks an era in the history of medicine on this continent. Disease is described as it exists here and as seen by American eyes; for, whilst due attention is paid to European authorities, the majority quoted are American and Canadian.

The student and the practitioner cannot afford to be without this handbook, the best extant. The blemishes will, no doubt, disappear in future editions, and permit the book to be what it ought to be—a classic.

We shall, later on, deal more fully with the work.

Surgical Diseases of the Ovaries and Fallopian Tubes, including Tubal Pregnancy. By J Bland Sutton, F.R.C.S., Assistant Surgeon to the Middlesex Hospital, London; late Hunterian Professor, Royal College of Surgeons of England. In one 12mo. volume of 513 pages, with 119 engravings and 5 colored plates. Cloth, $3.00. Philadelphia: Lea Brothers & Co., 1892.

Mr. Bland Sutton is so well known as one of the most distinguished surgeons and pathologists of Great Britain that we need only say that this work is well worthy of its author. Mr. Sutton says, in his preface: "Though the book is largely based on personal investigation, full justice is done to the original work of other surgeons. This is a method rarely followed by those engaged in that section of surgical craft known by the grandiloquent term, 'gynecology.' Any attempt to put the pathology of extra-uterine gestation on a sound basis is rendered difficult by the large number of erroneous assertions, or, as Jevons styled them, false facts, which abound in the literature of this important subject; they have retarded progress because it is often impossible to prove the falsity of records relating to specimens no longer in existence. The time is not far distant when even teachers of midwifery will wonder how they could ever have believed that impregnated ovum would grow upon the peritoneum."

A Dictionary of Treatment, or Therapeutic Index, including medical and surgical therapeutics. By William Whitla, M.D., Professor of Materia Medica and Therapeutics in the Queen's College, Belfast. Revised and adapted to the pharmacopœia of the United States. In one octavo volume of 917 pages. Cloth, $4. Philadelphia: Lea Brothers & Co., 1892.

This is an excellent practical book, which ought to become very popular among busy practitioners. Diseases are taken in alphabetical order, the first being "abortion," and the last "yellow fever." In connection with each the treatment is discussed, and the remedies most suitable, in the opinion of the author, are recommended. It will thus be seen that it does not give simply a list of drugs, or a number of prescriptions for each ailment, but rather a complete statement of the best modern therapeutic methods.

Consumption: How to Prevent it and How to Live with it. By N. S. Davis, jr., A.M., M.D., Professor of Principles and Practice of Medicine, Chicago Medical College. Philadelphia: F. A. Davis, 1891.

This valuable little book has gradually evolved from the hygienic rules laid down in brief conversations with patients. Since it is impossible, in a brief consultation, to give a consumptive all the necessary directions, the author has endeavored to make the work one which may safely and profitably be placed in the hands of patients. The object is laudable, and the advice given trustworthy. The details as to the hygiene of the consumptive, his food, the exercise to be taken by him, and the most suitable climate for him to live in, are dealt with in such a way as to be instructive to, and valuable for, both patient and physician.

Saunders' Question Compends, No. 23: Essentials of Medical Electricity. By D.D. Stewart, M.D., and E. S. Laurance, M.D. Philadelphia: W. B. Saunders, 1892.

Mr. Saunders will permit us to offer him our sincerest thanks that this addition to his series is not arranged in the form of question and answer. Visions of our childhood's catechism no longer rise up against us as we look at the blue covers. The authors are both experienced eachers, and their knowledge of the difficulties of students have enabled them to clear away some stumbling-blocks in this difficult subject.

Wood's Medical and Surgical Monographs, December, 1891, contains Modern Materia Medica, with Therapeutic Notes. By Dr. Otto Roth.

The alphabetical arrangement of the work facilitates ready reference, and at the same time renders more noticeable any omissions. During a cursory examination of a few moments, we note the absence of any reference to Ouabaine, Jambul, Pichi, Erythroplaeine, Chekan, Manaca. An author must, no doubt, be often puzzled what drugs to describe, what to omit, but in a *modern* materia medica it certainly does cause some surprise to find that hydrogen peroxide is not even mentioned.

The Complete Medical Pocket Formulary and Physician's Vade Mecum, containing upwards of 2500 prescriptions, collected from the practice of physicians and surgeons of experience, arranged under an alphabetical list of diseases. Collated by J. C. Wilson, A.M., M.D. Philadelphia: J. B. Lippincott Co., 1892.

This pocket formulary, besides some 2500 prescriptions, contains a special list of new remedies, their dosage, solubilities, and therapeutic applications, tables of formulæ for suppositories, hypodermic medication, inhalation, a list of common poisons and their antidotes, a posological table, and other useful information, making it a real *vade mecum*.

Pamphlets and Reprints.

Hand Disinfection. Reprinted from *American Journal of Obstetrics and Diseases of Children.* Also, *The Ideal Dressing for the Abdominal Wound.* Reprinted from *American Journal of Obstetrics.* By Howard A. Kelly, M.D., Professor of Gynecology and Obstetrics at the Johns Hopkins University; Gynecologist and Obstetrician at the Johns Hopkins Hospital.

Tubal and Peritoneal Tuberculosis with Special Reference to Diagnosis. By George M. Edebohls, A.M., M.D., Gynecologist to St. Francis Hospital, New York. Reprinted from the Transactions of the American Gynecological Society, September, 1891.

(1) *Femoral and Ventral Hernia in Women; (2) The Kangaroo Suture.* By Henry O. Marcy, A.M., M.D., LL.D., of Boston, U.S.A., President of the American Medical Association; Surgeon to the Hospital for Women, Cambridge, etc. Reprinted from the Transactions of the American Association of Obstetricians and Gynecologists.

On Dermatol, a Proposed Substitute for Iodoform: Its Use in Surgical Practice. By Charles A. Powers, M.D., Surgeon to the Out-patient Department, New York Hospital; Instructor in Surgery, New York Post-Graduate Medical School and Hospital. Reprinted from the *N. Y. Medical Record.*

A Clinical Study of Primary Carcinomatous and Sarcomatous Neoplasms Between the Folds of the Broad Ligaments, with a Report of Cases. By J.E. Jauvrin, M.D., New York. Reprinted from Vol. xvi., *Gynecological Transactions.*

The Relation of Gonorrhœa to Disease of the Uterine Appendages. By H. W. Longyear, M.D., Detroit, Gynecologist to Harper Hospital, Visiting Physician to the Woman's Hospital, etc. Read before the Michigan State Medical Society, June, 1891.

The Climate of Southern California in Relation to Disease. By William A. Edwards, M.D., San Diego, California, formerly Instructor in Clinical Medicine, University of Pennsylvania, etc. Reprinted from the *Climatologist.*

Apparatus for Collecting Water for Bacteriological Examination. By Samuel G. Dixon, M.D., Academy of Natural Sciences, Philadelphia. Reprinted from *The Times and Register*, October 24th, 1891.

Tuberculin: The Value and Limitation of its Use in Consumption. By Charles Denison, A.M., M.D., of Denver, Colorado. Reprinted from the Transactions of the Colorado State Medical Society, 1891.

Some Suggestions as to the mode of Action of the Galvanic Current in Gynecological Practice. By Thos. W. Poole, M.D., Lindsay, Ont. Reprinted from the *Archives of Gynecology, Obstetrics, and Pediatrics*, Dec., 1891.

Microscopical Diagnosis of Tuberculosis. By Paul Paquin, M.D. Little Blue Book Co., Battle Creek, Mich.

The Practical Adjustment of Spectacles. By George M. Gould, M.D., Ophthalmologist to the Philadelphia Hospital, Philadelphia. Reprinted from *Annals of Ophthalmology and Otology*, January, 1890.

Publications from the Biological Laboratory of the University of Toronto, No. 3: Studies on the Blood of Amphibia. By A. B. Macallum, M.B., Ph.D. Toronto: Copp, Clark & Co., 1892.

Notes on General versus Local Treatment of Catarrhal Inflammations of the Upper Air Tract. By Beverly Robinson, M.D., New York. Reprinted from the *Climatologist*, December, 1891.

On the Demonstration of the Presence of Iron in Chromatin by Micro-Chemical Methods. By A. B. Macallum, M.B., Ph.D. Reprinted from the Proceedings of the Royal Society, Vol. l.

An Account of the Influenza as it Appeared in Philadelphia in the Winters of 1889-90 and of 1891-92. By J. Howe Adams, M.D., of Philadelphia.

Disposal of Waste and Garbage. Report of Committee at the nineteenth annual meeting of the American Public Health Association, 1891.

Proceedings of the Academy of Natural Sciences of Philadelphia, 1891. Part iii. Academy of Natural Sciences, Logan Square, Philadelphia.

14th Annual Report of the Presbyterian Eye, Ear, and Throat Charity Hospital. No. 1007 East Baltimore Street, Baltimore.

Obituary.

H. ROBERTSON, M.D., M.R.C.S. Eng.—The circumstances surrounding the death of Dr. Hugh Robertson were exceedingly sad. He contracted diphtheria from one of his own children, and died after a short illness, March 24th. He was best known as a teacher of anatomy in Trinity Medical College, where he was highly respected. After the death of the late Dr. Fulton, he was appointed as the representative of the College on the Senate of the University of Toronto.

THOMAS A. KEATING, M.D., M.R.C.S. Eng.—One of the best known of western physicians was Dr. Thomas A. Keating, of Guelph, and the news of his sudden death, March 13th, was heard with deep regret by his many friends. He had for many years a large practice in Guelph and vicinity, and was held in high esteem by his brother practitioners. He became a member of the Royal College of Surgeons in England in 1860, and received the degree of M.D. from Victoria University in 1861.

Therapeutic Notes.

STERN (*La Sem. Med.*, 1890) has treated successfully by iodide of potassium five cases of urticaria, four of them being more or less chronic and rebellious to all previous treatment. None of the patients were either syphilitic or asthmatic. In one case, of four months' duration, the itching disappeared on the second day of treatment, and the cure was completed after two and a half drachms of the remedy had been taken. In two cases (one acute, the other chronic) the itching was at first increased, but a successful result was obtained in each case after the administration of seventy-five grains of the drug.—*Maryland Medical Journal.*

RHUS AROMATICA is a valuable remedy in enuresis of children; dose, from five to ten drops three times a day of the fluid extract. It will also sometimes cure what is believed to be diabetes. Its exhibition in small doses three times a day will steadily decrease the amount of urine passed, and relieve the inordinate thirst. It is the remedy for hemorrhage of kidneys and bladder.—*Medical Tribune.*

Miscellaneous.

PATENT MEDICINES AND THE LAY "PRESS."—At the annual meeting of the Canadian Press Association, held in Ottawa, Mar. 3rd and 4th, Dr. Playter brought before the meeting the subject of patent medicine and cure-all advertisements. Why, the doctor said, should the general press insert such advertisements any more than the medical press? Patent medicines did an incalculable amount of harm, promoted intemperance and disease, misleading the people until it was too late in many instances, disease having progressed too far for medical skill to apply successful remedies. The most excruciating of all pains, especially to most readers of papers, was "Paine's Celery Compound." The press was a powerful educator, a great power for good or for ill. The time would surely come when this practice of the press would be abandoned. Dr. Playter asked for a committee to be appointed by the President to report on the subject at the next meeting of the association. The President referred the question to the Executive Committee, and said the association would be glad to have a paper on the subject from the doctor at the next meeting. Dr. Playter intends to give a paper on it, and to press for more discrimination in regard to the advertising of such nostrums.

NEW BUILDINGS FOR THE JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA.—The Board of Trustees and the Faculty of the Jefferson Medical College have just completed the purchase of two large lots on Broad Street, giving them a frontage of about 300 ft. and a depth of 150 ft., upon which they will proceed to erect at once a handsome hospital, lecture hall, and laboratory building. The estimated cost of the buildings is $500,000. The hospital will be built not only as a suitable building in which to care for the sick and injured, but will also be provided with a large amphitheatre for clinical lectures. The basement of the hospital will be given over to the various dispensaries, each of which will be provided with large waiting and physicians' rooms.

THE cultivation of the erythroxlon coca has been introduced into Hindustan. It grows like a weed in Madras, and the leaves are said to yield a cocaine fully equal to that obtained from the American coca.

AT the last meeting of the Governors of St. Thomas' Hospital Mr. William Anderson was elected surgeon, in succession to Mr. John Croft, who has retired by seniority.

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TORONTO, APRIL 16, 1892.

Original Communications.

AN ADDRESS DELIVERED IN THE LEGISLATIVE ASSEMBLY ON THE PROPOSED AMENDMENT OF THE MEDICAL ACT OF ONTARIO.

BY A. M'KAY, M.D., M.P.P., INGERSOLL.

Mr. Speaker: Before this vote is taken I would like to make a few remarks on matters of great importance to the Medical Council, and not only to the Medical Council in this province, but to the public as well, because if you strike at the root of any large educational institution you at the same time strike at the public and create an injury in one way or another. I think it is a very important matter, and would like briefly to refer to some of the differences and difficulties amongst the profession in this province at the present time. We all know very well, Mr. Speaker, that in every responsible body, in every educational body, and in every incorporated body, there will be at one time or another some differences of opinion; and it is not unreasonable to suppose that even in the Medical Council and among the members of the College of Physicians and Surgeons of this province you will occasionally find a difference of opinion. It was only a short time ago that the College of Pharmacy had its difficulties to contend with, and they came to this House for legislation, but they asked for it through their own representatives. We found two factions there, one striving with the other, but that does not prove that the College of Pharmacy is not legislating in the interests of the public and in the interests of the members of that college. We also find that the Dental College have their difficulties to contend with, and even this very session we have a bill for the purpose of amending that Act. We know well when matters of importance in the Law Society come up you will find there strong differences of opinion, and when their elections are on they are very active in placing their views in reference to matters affecting the Law Society before the profession at large. Simply because there is some difference of opinion in the medical profession in reference to this College is no proof at all that the College is not doing good work and acting fairly in the interests of all concerned. What are the facts? In 1868, as properly said by the honorable member for Lennox, there was a movement made in this province for the purpose of organizing the Central Board of Examiners. Not only among the profession throughout the province, or throughout Upper Canada, at that time (it was before Confederation, or at least about the time of Confederation that the agitation sprung up), was there a strong feeling that the different licensing bodies in this province were turning out medical men who were not properly qualified, but the public were beginning to lose confidence in the graduates sent out from the different schools; and when the profession were agitating for a central board, they found that they had at their backs a strong

public sentiment in favor of raising the standard of medical education. Hence we find that that agitation was so vigorous that those colleges that had the right to prepare candidates for license all combined for the purpose of forming this central board. With reference to this bill I may say that, so far as the bill in its entirety is concerned, there is no agitation at all. All the petitions sent to this House, so far as I can make out, and I have read them all pretty carefully, were on this line They asked for the repeal of the penal clause that was introduced last session; and there is not one single petition signed by any member of the College of Physicians and Surgeons in the Province of Ontario in favor of the bill now presented by the honorable member for Lennox. They ask simply that the penal clause introduced last session be abolished. That being the case, I think this House should consider well before they undertake to interfere with the legislation of last session, more especially as this legislation was not initiated by a few members here and there scattered throughout the province. We know that a representative committee from the College of Physicians and Surgeons came to this House; they met the medical men in the House and consulted with them, as well as the other members of this Assembly, and I may say that no medical man in this House was more enthusiastic in favor of the legislation for last session than the honorable member for Lennox. I do feel somewhat surprised at the position he is taking to-day, for we know that the only clause that he objected to in the bill I had the honor to take charge of last session was the last clause in his present bill; I refer to the one in reference to keeping the register in a proper condition, a clause taken from the British Medical Act.

No one will deny that the College of Physicians and Surgeons have done good work in the province, and if there is one thing more than another that the public like to be protected from it is from the ignorant and uneducated physician who is in charge of the lives of his friends and his family.

If you look at some of the neighboring states where they have very lax laws in the medical education, you will find that they have not the public confidence in their physicians that the public have in the Province of Ontario. I believe there is no state in the Union, there is no province in the Dominion, and I may say there is no civilized country to-day, that has a better examining board than we have in the Province of Ontario. Our Medical Act is considered to be one of the model enactments of the present day. Of course there may be some matters that will bear a little harshly, or appear to bear somewhat harshly, on some of the members, but, for all that, I do not think it is right to destroy the influence of an institution simply because a few members of the profession in the province are opposed to some of the clauses it contains.

In looking at the bill of the honorable member, we find that the first section asks for the repeal of section 27 of the Ontario Medical Act. Now, what does that mean? This was not a portion of the legislation passed during last session; clause 27 was added to the Ontario Medical Act in 1874. It was the clause imposing a fee upon the profession in the province who were members of the College of Physicians and Surgeons. Why did they ask that? The Council of the College of Physicians and Surgeons found they were not possessed of sufficient funds to properly carry out the affairs of the Council without receiving financial aid from the profession at large. They also thought it was unfair while they were affording a certain amount of protection to the profession to say that all the fees coming into their treasury should be exacted from the students that came up for examination. Consequently they came to this House and asked for legislation to impose a certain small fee of one dollar upon the members of the profession in the province. Now, as a result of that, we find that they have gone into certain undertakings; they have, in the interests of all concerned and according to judgment, gone into buildings and equipments that would of necessity absorb considerable of the funds of the College.

Now, if it is found that the fee imposed in 1874 could not be collected—and I think I will show you before I get through that such was the case—if this House allowed the Council to believe that they were to receive a certain revenue from the profession by way of an annual fee, I claim it would not be keeping faith with

the Council at the present time to repeal that Act; it would be cutting away their source of supplies. Now we ask as a profession for no grant from this province. The College of Physicians and Surgeons are a self-sustaining body; they have no Osgoode Hall; they have no support, as some of the other professions have, from the provincial funds; and they think that it would be scarcely fair, in the face of the legislation that was passed in 1874, to deprive them of that revenue at the present time.

We know that there is considerable misapprehension among members of the medical profession in Ontario with reference to the College building; they seem to think that it was an unnecessary expenditure and might have been avoided; but it was found, owing to the large number of students that came up year after year, necessary for them to have a properly equipped building and examination hall. We will just for a moment look at the advantages of that building. It is claimed that in consequence of having built that structure the fees are increased, and if that building was done away with it would not be necessary to collect the fee at all. I will just briefly refer to the position of the building at the present time: The building cost, in all, some $60,000. You know that $60,000 at five per cent. would represent $3000 a year. The insurance on that building would amount to about $80; the taxes would amount to about $652; the man to run the elevator gets $260; the water costs $400; fuel $600, and gas $150; or, in all, the cost of that building to the profession amounts to $5142. On the other side of the sheet we find that it was necessary, for the purposes of the examinations before the College building was completed, to rent buildings for that purpose; and, taking the year before the College was occupied, the expenses for that purpose amounted to $750. The rents received from the present building, from the offices now rented, amount to $4090; so that they have, then, upon the other side of the sheet a sum of $4840. If you deduct that amount from the expense of the building as it now stands you will find that there is a deficit, so far as the Council is concerned, at the present time on the building of $302 per annum. But we must not forget that that building is situated in a central location, and the offices no doubt in a reasonable time will be all occupied. If the balance of the building should be rented at the same rate as that at present in use, we find that it will add further to the income of the College building alone some $3000, or, in all, making a total of $7840. I am of course now counting on the future, assuming that those rooms will be rented. We will then have to the credit of the building itself a surplus of $2708 annually.

As to the value of the building itself: When the College purchased the site and the old church that was on the lot, they paid $13,000. After the old building was removed the Council were offered in hard cash the sum of $20,000 for the lot alone, and to-day they can take for that building as it now stands the sum of $100,000. So, so far as that investment is concerned, I think that the profession at large, when they come to know the actual facts of the case, will not and cannot condemn the Council for their action. It may be asked, why do they need a building at all? We know that the numbers of examinations have increased, and that the numbers of students examined have increased, and it was absolutely necessary in the interests of the profession and in the interests of the students to have a place for those examinations. The number of students now compared with the number when the College was formed is very large indeed. Usually, the examinations alone take something like twenty-eight days in the year. Then, again, as the science of medicine advances and as the educational standard is increased, the equipments of the College have also increased. They require a different set of models; they require surgical appliances; they require materia medica specimens, and all that is required for conducting their examinations in a proper and practical manner. A few years ago examinations were not of the same character as they are to-day, and I claim that this is in the interests of the public. Instead of a student leaving the colleges now with the simple written examination, and perhaps a few minutes of oral examination, they are taken through the wards of the hospital and there compelled to put on surgical appliances, and everything is done for the purpose of giving them a better education and of making them more perfect in their profession.

Now, by the honorable member's bill, section 2, "section 41*a* of said Act, as added thereto by section 8 of the Act passed in the fifty-fourth year of Her Majesty's reign, chaptered 26, is repealed." That refers more especially to the clause passed last session. When the committee of the Council came to this House asking for certain powers to collect fees, they gave us a statement somewhat similar to this: They stated that although the Act was on the statute book for collecting fees, they found that under the ordinary Division Court process it was absolutely impossible to do so. They showed conclusively from their books that they could not succeed in getting anything like the amount they should get, and at that time they had actually on the books of the College arrearages of dues amounting in all to the sum of $13,000. They told us that in 1888 they collected $630 from 2100 physicians in this province, and it cost to collect this amount $430. In 1889 it cost $319 to collect $376. We find on looking over the books of the College, owing to the fact of the amendment of the last session, that they have since that collected, since that amendment was placed upon the statute book, the sum of nearly $7000. That certainly is not all arrearages, but a large proportion of it is of that nature. In the year 1891 the amount collected was $4726. Since that time and since the beginning of the year it has amounted to nearly $7000, and the cost of collecting that $4726 was the simple postage for sending out the notices. Some of the medical men claim that it is an infringement upon their rights to say that they should labor under a temporary disability simply on account of not paying their annual dues. But we know that nearly every profession in the province is situated in the same way, so far as collecting the fee is concerned. It was only the other day in this House that a bill was passed for the Surveyors' Association embodying the exact clause that we have here—that is, an erasure of the name provided that they do not pay their annual dues. The Pharmacy Act contains exactly the same provision. The Solicitors' Act is really more stringent than is our amendment of last session. They are not only removed for non-payment of dues, but they are fined as well, and fined very heavily if they still refuse to pay. Then by the Architects' Act, with an annual fee of $4, they are suspended after twelve months. Nearly every incorporated institution finds it absolutely necessary to have a provision of this kind for the purpose of collecting their dues. In the Incorporated Stock Exchange, with an annual fee of $25, if members are in arrears for six months their seats are declared vacant. In the Independent Order of Oddfellows the same provision is applied. The Ontario Society of Artists, the Board of Trade in the City of Toronto, the Obstetrical Society of London, England, The Royal Canadian Yacht Club, and all the fire and life insurance companies compel prompt payment on assessment, showing you that this is no exceptional legislation, viz., striking them off the roll for non-payment of dues. It was found absolutely impossible to collect those dues by ordinary Division Court process. And why? We know that when a party resisted payment, if he defended the suit, it was necessary to prove the account. That meant taking the books of the College to the district or Division Court where the case was sued. And you know that all they would get would be Division Court costs in case they would win. In some cases it would cost them perhaps $15 or $20 to collect the sum of $8 or $10, and it was found, so far as the fee was concerned, to be unworkable and to be worthless to the College. Another provision in the Act proposed by my honorable friend from Lennox is the one striking out the representatives from the universities and the colleges in this province. As I told you before, this was a really compromise Act; the colleges and the teaching bodies gave up their rights on condition that they would have a voice in the central body called the College of Physicians and Surgeons; only on those conditions would they give up those rights which they possessed, and I claim it would be unfair to those teaching bodies to say: Now you have given up your rights in 1868, and because of that we will take away all your rights that you have in the College of Physicians and Surgeons to-day.

Why, sir, the attempt was made a few years ago to form a central examining board in England on the same basis as the one we have now in this province, and the reason that they failed to form that board was because of the fact that

the teaching bodies there would not give up their rights, and the Parliament of Great Britain, believing that they had rights that should be respected, refused to take them away from those teaching bodies. They thought it would be unfair to treat those bodies in that way and take away their time-honored privileges; and for that reason they did not succeed in forming a council on the lines of the Ontario College of Physicians and Surgeons. I claim that that would be very unfair, indeed, to those colleges and to those universities, and we find that every college and every university in the province of Ontario, through their presidents, are writing against this measure; they claim it is unfair. It was just the other day that I received a number of letters from some of the universities. Here is one from Sir Daniel Wilson, President of the Provincial University, dated 21st March, 1892, in which he says:

46 ST. GEORGE ST., TORONTO,
21st March, 1892.

Dear Dr. McKay:

I am informed that a bill is before the Legislative Assembly which aims at depriving the University of Toronto, along with other bodies, of the right heretofore enjoyed by them of electing a representative on the Ontario Medical Council.

The fitness of the University Senate to send a representative to that body is so obvious that I can scarcely imagine there is any danger of the Legislature listening seriously to the proposal. But if it should be favorably entertained, I beg leave to urge the fitness of the Senate of the Provincial University to wisely exercise such a franchise, and to protest against its being withdrawn, as opposed to the best interests of the community.

Yours sincerely,
DANIEL WILSON.

Dr. McKay, M.P.P.

We have, from Queen's University, a letter to the same effect, and from the Western University and from Trinity University letters of a similar purport. Also we have an official document from the medical schools of the province protesting against taking away their rights to be represented in the Ontario Medical Council. We have a protest from the Dean of the medical department of Toronto University, Dean Aikins, as well as from Dr. Geikie, of Trinity College, and also letters from the Western University, London, and Queen's University, Kingston, protesting against any interference with their rights. Now what are the facts of the case, Mr. Speaker? It was stated by the honorable member for Lennox that the physicians in the province were not properly represented. What are the facts of the case? There are twenty-six representatives altogether in the Medical Council—there are twelve territorial representatives; the College representatives amount to nine, including the medical schools and the universities; then we have further representatives from the homœopathic body in the province. We must not forget that they also gave up all their rights to examine and to license for the purpose of being represented, and being properly represented, on this Medical Council. Taking those college and university representatives on the Council, the cry of centralization is not well sustained. They are not all from the city of Toronto, and, in fact, very few of them belong to this city. They are mostly men practising their profession in the cities and towns of the province. Dr. Rosebrugh, of Hamilton, represents Victoria College; Dr. Moore, of Brockville, represents Queen's College; Dr. Harris, of Brantford, represents Trinity College; Sir James Grant, Ottawa, represents the Ottawa College; then we have Dr. Fowler, of Kingston, representing the Royal College of Surgeons; Dr. Fenwick, of London, represents the Western University, etc.; so that out of all the college representatives on that Council board, we find that only three of them are in the city of Toronto, namely, Dr. Britton, representing Toronto University, Dr. Geikie, representing Trinity Medical College; and Dr. Thorburn, the Toronto School of Medicine. So, placing it upon its widest base, I think, after looking at these representatives, no one can say that the profession throughout the province is not fairly and properly represented at that Council. Even if they were not, the Legislature should not take away the rights of the different teaching bodies in the province. It would be unfair, and would be violating the compact entered into in 1868.

I will now refer to the balance of this bill: "Section 41*a* of the Ontario Medical Act, as added thereto by section 8 of the Act passed in the fifty-fourth year of Her Majesty's reign, chap. 26, be repealed." That means that the power that those laws gave that Council last year to keep the register in a perfect condition should be taken away. Now the honorable

member for Lennox, in referring to that clause, made the statement that the members would be erased from the list without being conscious of it. He may be quite right, because this matter applies to the members who are dead, for the purpose of keeping the register in a proper shape; so far as that is concerned I will admit that the honorable member is right, but that is about the only thing he has stated that I could endorse. That was taken from the British Medical Act, and it was found there that it was impossible to keep their medical register in a proper manner without having that proviso.

MR. MEACHAM: Why was it not put in our Act in 1874?

MR. MCKAY: I can't tell you, sir; I was not here in 1874. So far as that is concerned, I think you will all admit that if we have a register it is in the interests of the profession, and in the interests of even the commercial world, and in the interests of the public as a whole that that register should be a correct one; and unless you have that machinery and unless you have that power in the Act, it is impossible to keep it correctly and in order.

Now I may for a few moments refer to those petitions. My honorable friend read a letter that I sent to a few of the medical men in the province; that letter was quite correct, and I willingly acknowledge its authorship. I did send this letter. There were some sixty medical men whose names were on those petitions that contained a statement that was not in accordance with the facts of the case. I corresponded with a few of those medical men, and asked if they signed those petitions not knowing the contents of them, and I received a great many answers, some favorable to my contention and some unfavorable. I refer more particularly to the third clause in the petition, that the said Council disenfranchises all in arrears of the annual fee, who constitute about two-thirds of the profession, etc. Before sending that letter to the different medical men who signed that petition, I inquired of the registrar to find out if it were possible that any of the registered medical practitioners were disenfranchised—that is, if they did not receive their ballots during the elections. I contended then, and I would now, that if that were the case it was a wrong, and a wrong that should be righted. No man in the profession should be deprived of his right to express his opinions at the poll. I don't care whether it is for the purpose of electing a member of the Medical Council or electing a member of Parliament. That right should be a sacred right, and any interference with it should be resented, and for that reason I asked the registrar if such were the case, and this is his reply:

THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.

TORONTO, March 22nd, 1892.

Dr. McKay, House of Assembly, Toronto, Ont.

DEAR SIR,—In reply to your enquiry, I beg leave to say that members in arrears of fees were never disfranchised, and whenever an election has been held for the Medical Council all members of the College have been forwarded voting papers, whether in arrears or not for assessment. There never has been a by-law passed by the Council disfranchising members for non-payment of fees.

Yours faithfully,
R. A. PYNE,
Registrar.

On the strength of that I sent out those papers, and I got a great many replies. And what did those replies contain? I may state, however, I did not send out the form for reply, as the honorable member stated before he sat down. That was the only letter I sent out, and I thought it was a fair one to send, and I believe so still. I will just read one of the great many letters that I received in reply as an example. I think there are something like thirty letters asking for the erasure of their names from the petitions presented to this House, stating that they had signed under a misapprehension, and some of the members that answered wrote in still stronger terms than that. I have the letters all here, and they can be seen by any member of this House. Here is one, dated March 18th, 1892, in reply to this letter that I sent out:

LONDON, March 18th, 1892.

Dr. A. McKay, M.P.P.:

MY DEAR DOCTOR,—Your kind note to hand, for which many thanks. The medical men of this province are the subjects of a base conspiracy, propagated in a very mean way. Many of us signed a petition in a very careless manner, without reading it, on the assurance of the gentleman who circulated it that it was only intended to relieve the tax on members of the profession who were in straitened circumstances. These signatures, it now appears, are being basely used to upset the Ontario Medical Act, with which

we are well satisfied. Hoping that you will do all in your power to defeat the object of these parties,

I remain,

Gratefully yours,

H. ARNOTT.

This is from a medical man practising in the city of London. I may say, out of the fifty-two medical men in the city of London who signed the petitions, something like twelve or thirteen asked to have their names erased. The whole medical faculty of the Western University are asking to have this legislation that is now introduced opposed. That is only one specimen of the letters. I have a few letters from some members I wrote to, stating that they knew perfectly well what they signed. They believed that clause to be correct, and they signed it knowing it to be correct. I may say that even on that understanding they signed under a misapprehension, because, if we take the word of the registrar of the College of Physicians and Surgeons, they must have signed under a misapprehension. We know when matters affecting the profession come up for discussion, the different medical associations are nearly always on the alert. In some districts and in some counties they called meetings of their medical associations, regularly organized institutions, and after the matter was discussed properly before them they in nearly every instance came to the conclusion that the legislation of the last session was in the interests of the profession as a whole, and asked to have the proposed amendment opposed. We have here one from the Toronto Medical Society; I will not read it, but that society is composed of about 200 members. We have here a resolution passed at the Ottawa and Pembroke Medical Association, composed of 123 members. I don't say that all the 123 members were present, but what I say is that they called a meeting of that association for the purpose of discussing those various matters, and it is reasonable to expect if any member of that association had a grievance that he would have been very apt to go there and ventilate it. This is the resolution, moved by Dr. H. P. Wright, of Ottawa:

RESOLUTION IN RE AMENDMENT OF THE MEDICAL ACT OF 1891.

At the regular semi-annual meeting of the members of the Bathurst and Rideau Division Medical Association, held in the city of Ottawa, Ontario, on the 27th day of January, 1892, the following resolution was unanimously carried:

"Moved by Dr. H. P. Wright, of Ottawa, seconded by Dr. W. W. Dickson, of Pembroke, and resolved:

"That this association hereby declares in the most unqualified terms its approbation of the course recently adopted by the Ontario Medical Council, particularly the securing from the Legislature the amendment of the Medical Act of 1891, and likewise the amendment of the regulations by which the standard of preliminary and medical education has been raised, and we consider the levying of such a modest annual tax as $2 as the least that could be expected, and deserves our support. We are of the opinion, moreover, that if all the medical practitioners would take the trouble to study the meaning of the amendment to the Medical Act of 1891, no exception could be taken to it."

Carried unanimously.

H. B. SMALL, M.D.,

Ottawa, Feb. 23rd, 1892. *Secretary*.

The Bathurst and Rideau Division comprises the city of Ottawa and the counties of Carleton, Lanark, Leeds, and Renfrew, and the number of members is 123. And so forth, all along the line. In the county of Brant they have a county association, which passed a strong resolution in favor of the legislation of last session; and we find different other medical associations have passed resolutions in favor of the legislation of last session:

Moved by Dr. Henwood, seconded by Dr. Griffin, and resolved, that in the opinion of the Medical Association of the county of Brant the recent amendment made to the Medical Act empowering the Council to collect an annual fee from each member of the medical profession, similar to what is done by the Law Society and Pharmaceutical Association, is highly to be approved, and that it is desirable that no change should be made in the Medical Act in that regard.

The association further deprecates frequent changes in the Medical Act.

D. DUNTON, *President*.

M. J. KEANE, *Secretary*.

To DR. A. MCKAY, M.P.P.,

Legislative Assembly, Toronto.

March 12th, 1892.

Although those agitating for the repeal of the clause of last session had all summer to prepare their petitions, they only received the signatures of 440 men all told, and we find here, taking the petitions from the different districts that were presented to this House, 170 names; then we have the letters from about 20 medical men writing independently of any communications sent to them in reference to it. Then we have

petitions from outsiders. If we take the societies as an index, we have something like 660 against this proposed measure. I think that it is fair to conclude that the legislation asked for in this bill is not asked for by the medical profession of the Province of Ontario. Those who take an interest in medical education in this province say that we have a representative institution, and legislation should be based upon the requirements of the profession, and should be discussed by their own representatives in council assembled. Now, sir, it was the policy of the Government and of this House last session to declare that when a bill was introduced for the purpose of interfering with the College of Pharmacy Act, this House did not see fit to interfere, simply because it did not emanate from the proper source.

I think I am safe in saying, Mr. Speaker, that the profession, as a whole, are not prepared for such radical legislation as this. They are not prepared to see an institution of which they feel proud destroyed by legislation of this kind; because if you interfere with the funds of any institution, you are striking at the very fundamental principles on which it is founded. If you say to that body, "Fully one-third of your income shall be cut off at one blow without the matter being discussed by your members or by the representatives assembled," I claim, Mr. Speaker, that it would not be in the interests of the profession and of the public to pass legislation of that kind. Why, sir, the power to erase from the roll lawyers and solicitors is one of the best safeguards to the public. We know perfectly well if a solicitor will deal wrongfully with the funds of his client, there is a power under the control of the society themselves to strike him from the roll; and I believe that that power exercised by the solicitors is one of the greatest safeguards to the public. It is just as important to the public at large that that power shall be judicially exercised by the central body, the College of Physicians and Surgeons, for this profession. They came to this Legislature a short time ago asking for power to erase for misconduct, and you very properly granted that concession. We believe that any one who disgraces the profession should be struck from the roll, and not allowed to practise his profession in this province.

Now, sir, if it is important to the public that that power should be possessed by the Law Society, I claim it is ten times more important to the public that it should be possessed by the medical profession. If the standard of medical education is kept up, and if the profession is purged from those who disgrace it, is it not in the interests of the public? I think no man will deny that it is. And I think, Mr. Speaker, taking all those facts into consideration, and taking the fact that we have a representative institution granted a charter by this Assembly, and taking the fact that we have an election every five years, and that they have a meeting of the Medical Council every twelve months, that it would be unfair to that body, the Medical College, to say, we will pass legislation here behind your backs without ever consulting you or consulting the profession you represent. All we ask you to do is this: Allow the matter to be discussed by the representatives of the profession when they come here in June next to consult and advise on questions of importance to themselves; and if they come here asking for legislation for the purpose of improving the Medical Act either one way or another, we should then consider what they ask for, and grant it, if it is reasonable and right and in the interests of the public. Mr. Speaker, I am not in favor of this bill. I do not say that it should not go to a committee; so far as that is concerned, it is useless for me to say anything to the contrary; but I sincerely trust that this Legislature, in its wisdom, will think well before they destroy or allow to be destroyed one of the best educational institutions that we have in the Province of Ontario.

EXTRACTS FROM THE ANNUAL ADDRESS DELIVERED TO THE BATHURST AND RIDEAU DIVISION MEDICAL ASSOCIATION, JULY 15, 1891.

BY A. F. ROGERS, M.D., OTTAWA,
President of the Association.

Gentlemen: I claim we have in Ontario the best and most comprehensive Medical Act in the world, a credit alike to the medical profession, the Government of Ontario, and the people of this province.

By the recent amendment to the Medical Act* four points have been gained, as follows:

(1) The Council has now the power to raise the standard of preliminary education to an Arts degree.

(2) Under the former Act any one whose name had been erased from the register by the Council for unprofessional conduct had the right to appeal to "any judge of the High Court of Justice," but now he must appeal to the "Divisional Court" of three judges, and there is much more safety for the Council in having a case tried by a High Court of three judges than by one judge alone, for it is a well-known fact that one or two of the judges in Ontario would decide against the Council in almost every instance.

(3) The third point in the amendment to the Act relates to the members of the College of Physicians and Surgeons paying their annual dues. The College has no power to increase the dues to more than $2, but the members must now pay them annually or have their names erased from the register until payment is made. The dues are payable on the 31st of December of each year, and on payment the member receives an annual certificate, which is the only proof of registration; likewise, if he omits to pay his dues for twelve months, then his name has to be erased, but at any time that payment is made thereafter his name shall be immediately restored. Before erasure, also, can be executed, the registrar must give the member two months' notice by registered letter addressed to his register address. The reasons advanced for this method of collecting the dues are: First: The expenses of the College heretofore have been almost entirely met by students' fees; and if by raising the standard of pre-medical and medical education the number of students is reduced, then we shall be compelled to have power to secure support from the members of the profession, or the College must succumb for want of funds. Secondly: The College is in debt, and is carrying a heavy load in the shape of a $60,000 mortgage on the building, which means $3,000 annually in interest, besides a floating debt of several thousand dollars on which interest has to be paid. The necessary expenses also to carry on the affairs of the College are naturally heavy, and include the salaries of the registrar, treasurer, detective, solicitors' fees, payments to examiners, expenses connected with the meetings of the Council, etc., etc.

(4) The fourth point in the amendment to the Medical Act has reference to keeping the Ontario Medical Register correct, and gives the registrar power to write a letter to a member asking him if the address given is correct, and if no answer is received in six months the name shall be erased, but shall be restored immediately on compliance with the Act.

The next subject to be referred to is

THE MEETING OF THE MEDICAL COUNCIL, 1891, AND THE CHANGES IN THE CURRICULUM OF STUDIES.

At the meeting of the Council in 1890, Dr. Bergin moved for a committee to secure the curricula of all the colleges and universities obtainable, both British, Canadian, and foreign, and to report thereon at the meeting of the Council in 1891. This committee went to a great deal of trouble in obtaining the information necessary and preparing a report, which, with slight changes, was adopted by the Council.

(*a*) *Matriculation.*—In order to be registered as a medical student, the candidate must present a certificate of having passed "the University Departmental and Matriculation Examination, with prescribed Science course added, and compulsory," or he must have taken the degree of B.A. Only two ways, then, are open to the student to become matriculated, either to take the degree of Bachelor of Arts, or pass the Departmental University Examination, with Science.

(*b*) *Medical Course.* — If the student has passed the Departmental Arts Examination he has then to study medicine *five full years*, consisting of four winter sessions of six months each, and one summer session, with hospital attendance, and then one full year devoted to practical and clinical work in hospitals and dispensaries, either foreign, British, or Canadian. If the student, on the other hand, has taken the degree of B.A., he has then to study medicine *four* full years, including the last year of practical and clinical work, but he has only to at-

*This amendment to the Medical Act will be published in the Ontario Medical Register this year.

tend three winter sessions in College and one summer session.

(*c*) *Examinations.*—These consist of Primary, Intermediate, and Final, the Primary to be passed at the end of the second year; the Intermediate, consisting of all the final branches, at the end of the fourth year; and the Final at the end of the fifth year, consisting of clinical medicine and surgery and all the allied branches. Students having the B.A. degree will pass the Primary at the end of the second year; Intermediate at the end of the third; and Final at the end of the fourth year.

I wish to draw your attention now to the great importance of this enactment to the medical profession. The Departmental University Examination is one regulated and controlled by the Department of Education, and is uniform for the whole Province of Ontario, as well as a thorough test of proficiency in general education, the Science branches included being Botany, Zoology, Physics, and Chemistry, and I was informed by the Minister of Education that it is equal to the entrance examination for the second year in Arts of many universities. The student having passed this he is then to study five full years in medicine, or if he takes an Arts degree he has only to study medicine four full years, so that I think undoubtedly the majority of students hereafter will take the B.A. and four years' medical course. Again, this Departmental University Examination is not a teacher's examination — the student having passed it is given no certificate as a teacher; but it is purely a University examination, arranged and conducted by the Department of Education of Ontario. Just here I wish to point out to you one of the factors in producing the overcrowding of the profession which we find to-day. Formerly the Council accepted a third-class teacher's certificate, and then the standard was raised to a second-class non-professional teacher's examination. The names of all persons who had passed these teacher's examinations were published in the report of the Department of Education, and therefore each year the Dean of any medical school could send to each of those who had passed the required teacher's examination an announcement of his school, and enclose a circular pointing out that he or she was now matriculated as a medical student and could at any time begin the study of medicine, with such additional phraseology as might be deemed best to entice the person into the fold of that most philanthropic benefactor. By this means hundreds of young men who never thought of studying medicine were lured into the profession, only to find, when they got there, the overcrowding was so great that they might better have remained common school teachers, and with the natural result that many of them migrated into the Western States. All this rich field is now cut off, fortunately for the profession and the people as well, and I venture the prediction that not over ten per cent. of the number of persons will register as matriculated medical students in 1892 that were registered in 1882, and there is not the slightest question in my mind but that the adoption of this measure will decrease, when its operation begins to show on the returns, the number of persons entering the profession fully fifty per cent. As might be supposed, we did not carry this report in the Council without severe opposition on the part of some of the school representatives and their friends, and the first question was only carried by the casting vote of the chairman, who fortunately happened to be my friend Dr. Rosebrugh, of Hamilton.

Surveying the whole position calmly, it is impossible not to regret that these regulations now adopted were not secured by the Council ten years ago; but if the standard for the entrance to the study of and to the practice of the medical profession in Ontario was for years kept down by the Council, let me ask you to answer in all fairness who was to blame? Most assuredly it was the medical practitioners. Everywhere the members of the profession have exhibited almost complete indifference as to the Council; few knew, and cared less, what was done by their representatives in this medical parliament, and the medical journals, owned as they have been by the medical schools, have taken every care not to enlighten the medical practitioners of the many attempts made by some progressive members of the Council to raise the standard of preliminary education, and thereby make the future of the profession in Ontario look, at least, brighter. The school representatives have been active and vigilant, and, while their

number was small, yet they managed to control the Council in the past, and this was done by securing the election of friendly territorial representatives. How many members of our profession in Ontario have ever taken the trouble seriously to study their own Medical Act? Few indeed; and yet this Act has been for years published and sent to them by the Council in the Ontario Medical Register. How many members of the profession in Ontario ever read and carefully consider the report of the proceedings of the Council as published in their annual announcement? Possibly ten per cent. of the whole number would be above the average; and when such apathy has been shown by the medical practitioners in studying the course pursued by their representatives, and when the school members have been so alert, active, and diligent, stimulated, it is true, by selfish aims, can you wonder at the present overcrowded condition of the profession in this province? The Law Society has managed the affairs of the legal profession so much better than the Medical Council has ours that to-day in Ontario there are only 1,565 barristers, whereas the number of registered medical practitioners is, in round numbers, 3,000, or about two to one. And why? Simply because for the last fifteen years they have required all law students, prior to beginning the study of their profession, to pass an examination in Arts of a high class, almost equivalent to what ours is now, and then study law *five* full years, while the Medical Council exacted only a three years' medical course and a third-class teacher's certificate, with the natural result that two students began the study of medicine to one who began that of law. The teachers in the medical college have reaped a harvest, and now the medical practitioners are only suffering the consequences of their own apathy and indifference in the shape of an overcrowded profession.

The main object of the Council is to act as an independent State Medical Board, with full powers in the premises, to guarantee to the people of Ontario that none but thoroughly educated and competent medical practitioners shall be allowed to practise the medical profession in their midst, and I claim that the maintenance of a low standard of pre-medical and medical education was not fulfilling the trust imposed, and was, by overcrowding the profession, a direct injury to the medical profession, to the people of this province, and to the State.

Quackery, semi-quackery, dishonest dealing, and criminal practice are the inevitable outcome of an overcrowded medical profession, and these not only put a stain on the escutcheon of Medicine, but are a menace to the people of, and to the fair name of, our country. How is the State injured by there being too many medical practitioners? Within the last few years upwards of 1,000 persons born in Ontario and educated as physicians in this country have migrated to the United States and elsewhere, and the natural conclusion is that the reason they left us was because they found no chance of gaining a practice. Had it not been for the low standard of medical registration here, these persons, in all probability, would have entered other callings, agricultural, manufacturing, or mercantile, and remained in Ontario. Again, there are 3,000 medical practitioners in Ontario, and if 1,500 would be fully able to meet all the requirements of the population, which undoubtedly they could with ease, and as the medical profession belongs to the class of non-producers, we have taken 1,500 persons from occupations which are directly of value to the State, and placed them in a non-producing class where they were not required, and in this way injured the State. Let us, therefore, here in Ontario have a high standard, both of pre-medical and of medical education, and the law of supply and demand will always be such as to guarantee sufficient medical practitioners to meet the needs of the population.

THE PSYCHOLOGICAL LABORATORY IN THE UNIVERSITY OF TORONTO.

BY J. MARK BALDWIN, M.A., PH.D.,

Professor of Logic, Metaphysics, and Ethics, in the University of Toronto.

In the spring of 1891 an appropriation of $1,100 was made for the equipment of a laboratory for experimental psychology at the instance of the writer. A suite of rooms was set apart for the use of this department. The laboratory is located at the west end of the restored University College building on

the first (not the ground) floor. It is isolated entirely from the general work of the building, being over the rooms of the physical department. The rooms have light exposure from three sides. The room which is used for students' demonstration and practical work is cut off from the research rooms, thus making interruptions to the latter from noise, etc., unlikely. For the same reason, the central hall is laid with cocoa matting. The work-tables of the research rooms get light from the east, south, and west, a variety which is of great value, especially as the east exposure has reflected light from the walls of the main building (this is also partly the case with the light from the west windows). The rooms are artificially lighted by combination gas and electric chandeliers from the ceilings, and have besides movable incandescent lamps over the work-tables. The dark room is also furnished with incandescent lights. The floors throughout are carefully laid in hard wood. The work-tables are braced diagonally from the walls by iron rods. The rooms are heated by steam radiators. The walls and ceilings are finished in dull white and the woodwork in dark walnut, colors being avoided in order to keep the physiological conditions of sight normal. Natural and colored light can be let into the dark room through the south wall. The central hall is lighted through glass panels in the doors.

The fittings of the laboratory have cost about $450—a grant additional to the appropriation of $1,100 for instruments. This does not include, however, the arrangements for lighting, heating, and the special flooring. It is probable that the cost would be slightly more in the United States. Of the original amount appropriated, moreover, $300 is an annual allowance for the maintenance of the laboratory. The writer hopes, also, to have soon a paid assistant, who will be constantly at work in the rooms.

The laboratory will, it is hoped, serve two main purposes: First, it is used to illustrate the undergraduate courses in psychology in the University; and, second, it is designed to serve as a centre for advanced research in the new lines of experimental work. Being the only foundation of the kind in Canada,* it will represent what we are doing in this line in the Dominion. The Department of Education of Ontario undertakes with great liberality to publish the researches of students who do work of real merit, and to distribute them generously. Publications issued from other such centres everywhere will be received in return with much gratitude; and new ideas in matters of technique, arrangement, etc., especially detailed notices of new pieces of apparatus, reprints from the journals, and announcements of new discoveries, will be welcome.

*The first in the British Dominion, as far as my information goes.

Selections.

LABORATORIES OF HYGIENE.

On the occasion of the opening of the new laboratory of hygiene of the University of Pennsylvania on Monday, February 22nd, an address was delivered by Dr. John S. Billings, of the army. By the courtesy of the editor of the *Medical News*, in which the address is to be published in full, we are enabled to give the following extracts:

Laboratories planned and fitted for public use, offering to any one who is able and willing to pay a moderate fee and to submit to a few simple regulations not only opportunities for learning the details of the processes carried on therein, but facilities and means for making special research as he could only obtain otherwise at great expense and loss of time—such laboratories, I say, are all of comparatively recent date.

It is not yet twenty years since the first separate institution of this kind was established for hygiene—and even now there are not more than a dozen such laboratories, specially built and fitted for their purpose, in existence throughout the world. Of these the best known is probably that of the University of Munich, under the direction of Professor Pettenkofer, while the largest is that of Berlin.

This laboratory is the first structure of its kind erected in the United States, and it therefore opens a comparatively new field of work in this country. What is the nature of this field and what are its boundaries?

The object of hygiene is to preserve and to improve health, and there are few matters affecting

the physical, intellectual, emotional, and moral condition of man as an individual, or of men in communities, that may not come within the scope of its investigations. The destruction or avoidance of causes of disease is but a part of its objects—it is at least equally concerned with the means of making a man better fitted to resist these causes. "That kind of health," says Montesquieu, "which can be preserved only by a careful and constant regulation of diet is but a tedious disease." Disease, like health, is a vague term, including widely different and often very complex conditions, processes, and results, which must be observed, classified, and described in such a way that different men, widely separated in space and time, may know that they are seeing the same things, and thus may have the benefit of each other's experience.

In its scientific aspects, then—those which relate to definite and precise knowledge—hygiene rests largely on physiology and pathology, the third leg of the tripod being formed by vital statistics; while in its practical aspects it must rest on chemistry, physics, and the data of sociology and politics.

At any given time, therefore, its scope and practical value must depend largely upon the breadth and the solidity of the foundations which these various branches of science can provide for it. The opinions of the medical faculty of Paris as to the causes of the "black death," and the advice which they gave as to the means for lessening the "great mortality," absurd and preposterous as they now appear to us, were yet fully in accord with the knowledge and opinions of the time.

At the beginning of this century, physicians did not distinguish with any certainty between typhoid, typhus, and malarial fevers, or between consumption and various other chronic diseases of the lungs, and until this was done investigations into the causes of these affections were necessarily almost fruitless.

When, however, a clue is once given to the student of causes, he may be able, by detecting differences in these causes, to call the attention of the pathologist to differences in the results, and thus the bacteriologist, by proving specific differences in micro-organisms, all of which produce fever, suppuration, etc., induces closer study of details of cases by physicians, and the recognition of new and more clearly defined groups of symptoms and results, or, in other words, of new diseases.

We live in an age of specialization. Progress in science, as a whole, depends upon special progress in each of its branches. Our present knowledge of physiology depends largely upon the perfection of electrical methods. Pathology and pathological bacteriology are now waiting for increase of knowledge in organic chemistry. The law of evolution applies to this as it does to modern industrial progress.

The physician deals with sick men, and his first question is, What is the matter with this person? That is, what group of symptoms does he present, and to what derangement of his mechanism are these due? The hygienist deals with two sets of problems—the first relating to men who are not sick, and how their health and vital existence power are to be not only preserved, but improved and strengthened; the second relating to sick houses, feverish blocks or wards, infected localities, where the first questions to be solved are: What are the causes of this condition of things? How have they found entrance? Are they still acting?

In the investigation of causes he must consider not only the immediate or exciting, but also the remote or predisposing; not only those which are preventable, but those which, with our present knowledge, are unpreventable; and thus it is that heredity, race, local meteorology, occupation, and many other circumstances must be studied by him, as well as the effects of food, clothing, habitation, poisons, and viruses.

. . . . . .

The recent advances in our knowledge as to the action of certain micro-organisms in the production of disease in animals and man have been largely made by laboratory methods, and indicate clearly that the study of bacteria and microzoa, and of their development, products, and effects, must be an essential part of the work of a hygienic laboratory, which should provide the peculiar arrangements and apparatus which are required for this sort of work. In fact, several so-called hygienic laboratories are simply bacteriological laboratories, the interest in this particular branch of investigation

having, for the time being, overshadowed all others.

Our laboratory, however, must provide also the means for chemical investigations of air, water, food, sewage, secretions and excretions, and the products of bacterial growth; for testing the effects of gases, alkaloids, and albumoses of various kinds upon the animal organism; for investigations in the domain of physics pertaining to heating, ventilation, house drainage, clothing, soils, drainage, etc.

. . . . . .

Just at present research is being specially directed to certain minute animal organisms—the microzoa—such as are found in the blood in malaria and in the skin in certain diseases, and to immunity, especially to that immunity which may be artificially produced.

Experimental investigation is a slow process, and very uncertain in its results. An experiment may be conceived which seems as if it would give important results. The experiment itself would require only a few moments or a few hours if all the apparatus were ready to produce the required conditions, and to record in terms of weight and measure the results obtained. But to make this apparatus in the best form, and to provide the means of recording, may take a year or more, and in making this preparation a dozen problems will come up to be solved by other experiments.

You are pretty sure to discover something new, but by no means sure that it will be what you began to seek. Every discovery opens new questions and indicates new experiments, and the precise shape in which the work presents itself varies with place and season.

We cannot foresee precisely the demands which will be made upon us, or which we shall make upon ourselves, but we do know that we shall want some large rooms in which a dozen or twenty men can be at one time taught how to investigate, working under the eye of an instructor; and also a number of small rooms, each fitted for the work of one or two men who have attained a certain amount of skill, and are engaged in original research. In all these rooms we shall at times need to use microscopes, gas-heating, and steam; there will be vapors and fumes produced; there will be delicate instruments scattered about, and the rooms must therefore be light, have abundance of gas, steam, and water, hoods and flues for conveying away fumes, and plenty of fresh air without dust.

Many of the things that will be seen through the microscopes will be rapidly changing form, and we shall need pictures as well as descriptions of their different shapes.

The most useful drawings for our purposes are those made by sunlight, and therefore we want photo-micrographic rooms.

We shall wish to test the merits of various articles of house-equipment, such as different patterns of steam radiators, traps, sinks, closets, etc., and for this purpose we must have places where they can be fitted and put into use.

We must know what other investigators in other laboratories, and many places besides laboratories, have done and discovered, that time and effort may not be wasted.

We must therefore have the books and journals in which these are recorded, which are already many, and coming rapidly. A small library and reading room is therefore essential.

Much of the apparatus to be used must be either made or specially fitted and adjusted on the spot to meet special indications which it is impossible to foresee, and therefore we need a large workshop, with tools and appliances for working in wood, glass, and metal, and with power.

After describing the new laboratory, Dr. Billings continued as follows:

We hope that some increase of knowledge will be made here by the workers in the laboratory itself; but the main point to be kept in view is to provide well-trained, scientific, and practical men for other fields of labor. Dr. Mitchell has said that the true rate of advance in medicine is not to be tested by the work of single men, but by what the country doctor is. So, also—and even more so—advance in practical sanitation is not to be measured by laboratory records, but by what health officers and sanitary engineers are able to accomplish.

Even now we *know* much more than we *do*, and the skilled sanitarian too often finds himself in the position of the happy daughter of Priam and Hecuba, who could foretell, but to no purpose.

This laboratory is fortunate in being closely

connected with and in the immediate vicinity of a great medical school and of great hospitals. As was said before, one of the essential foundations of scientific knowledge of the causes of disease is minute and accurate diagnosis and pathology, and we are therefore in constant need of the best knowledge of leaders in these branches of medical science. The hospital is filled with specimens of the results of such causes, acting on the human body—from one point of view, Nature's experiments with poisons cunningly elaborated in the tissues of the body, or with viruses coming from without, upon blood and bone, muscle and brain. Much of the work of this new department will be connected with the results of these experiments.

The laboratory is also fortunate in being located in a great manufacturing city, where the effects of different occupations, of trades dangerous or offensive by reason of dusts, or of vapors, or of waste products, can be readily observed and the materials for study obtained. There is an immense field for a sanitary clinic here, and in the habitations, the streets, the water-supply, and the sewers of Philadelphia.

These clinics, however, cannot, as a rule, be reported for the press, either lay or medical, since to do so would, to a great extent, defeat their object; the great majority of the sick in houses and manufactories must be considered as strictly private patients, and their affairs held as confidential. In the case of public institutions, or of public nuisances, a somewhat different rule may apply.

Practical hygiene is to play an important part in municipal government, to secure the best form of which is now one of the most urgent questions of the day. Many of the questions to be decided by city officials as to water-supplies, sewage disposal, etc., require expert knowledge to answer.

Of course, the subject of hygiene and the work of a university department devoted to the increase and diffusion of knowledge in sanitary science extends far beyond the experiments and demonstrations for which this laboratory is specifically fitted. Bacteriology, chemistry, pathology, physics, and medical and vital statistics give us the foundations, but sociology and jurisprudence must also be studied in their relation to sanitation to obtain the best results.

It is in and to the home and to the workshop that these results are to be applied, and he who aspires to be his brother's keeper must know how his brother lives.

Labor questions, education questions, marine and inter-state commerce questions, and methods of municipal finance and government are all intimately connected with matters of personal and public hygiene, and economic consequences, as well as health, must be considered in the advice and regulations of the sanitarian.

I count it as fortunate, therefore, that there is a law school and a school of finance and political economy in this university to which the department of hygiene can look for advice and friendly criticism when these are needed, as they surely will be.

And now a very few words as to the needs of the laboratory. First of all, it needs men—men thirsting for knowledge, and fitted by previous training and education to come here and acquire that knowledge, not merely the knowledge that exists in books or that the teachers in this laboratory may possess, but that which is yet unknown, the weight of that which no one has yet put in the balance—the shape, and size, and powers for good or evil of things whose existence has not yet been demonstrated—men who will patiently and earnestly seek the answers to the questions, "What?" "When?" and "How?" in the hope that thus they may by and by obtain some light upon the more difficult problems of "Whence?" and "Whither?" even if they may never be able to answer "Why?"

There are not many such young men whose tastes will be in the direction of these lines of research, and of these there will be very few who will have the means to support themselves while engaged in the work. We need, therefore, the means to help them in the shape of half a dozen fellowships, paying about five hundred dollars a year each, and granted only to those who give satisfactory evidence of capacity and zeal.

The second thing we want is a demand on the part of the public for really skilled, well-trained sanitary investigators and officials such as we hope to send out from here; we want a market for our product; we want the legislators of this and other states, and of our rapidly growing municipalities, to be educated to appreciate

the importance and practical value of such health officials, and to give the best of them employment.

Thirdly, the laboratory wants the co-operation and assistance of sanitary authorities and inspectors, and especially of those of this city and state.

It needs to know from time to time what they are interested in and are working at, to have the opportunity of showing to its students cases of special interest—sick houses, localized epidemics, special forms of nuisance.

And, on the same principle and for the same reasons, it desires to have its attention called to special methods of heating, ventilating, and draining buildings, and especially public buildings, such as schools, hospitals, prisons, churches, and theaters, and to matters connected with the hygiene of manufacturing establishments and special occupations, methods of disposal of offensive or dangerous waste products, of protecting workmen against dusts, gases, etc.

In short, we want to know how these things are managed by the men who have a practical interest in them; and if, in our turn, we can suggest improvements, we shall be glad to do so.

Fourth, the laboratory wants a reference library as complete as it can be made, and always up to date. Many of the books and journals required must be purchased, and for this purpose a special fund is needed, but many of the works required can only be obtained by gift.

Thus we want all the reports of boards of health—state and municipal—of municipal engineers, waterworks and water commissioners, park commissioners, etc.

We want the catalogues and circulars of all manufacturers of heating and ventilating apparatus, of plumbers' supplies and house fixtures, of electric and gas fixtures, of machinery and apparatus connected with water-supply and sewage disposal.

We want copies of plans and specifications of large buildings of all kinds.

And these things can only be obtained through the aid and good will of manufacturers, engineers, architects, and sanitarians over all the country; and this aid I venture to ask, feeling sure it will be granted by those who know what is wanted.

I will mention but one more special want today, and that is of means for the proper publication of illustrated reports and accounts of the work done in the laboratory.

In the meantime we must be patient, and not too eager to touch the fruit of the blossom that is not yet blown.—*N. Y. Med. Jour.*

THE VENTILATION OF CHURCHES AND CHAPELS.—That churches should be so ill-ventilated and badly heated as to become sources of danger to the assembled worshippers is at once hostile to the spiritual as well as to the physical interests of the community. All sanitarians are aware that the air of chapels and churches often becomes distinctly injurious before even an hour of the service has elapsed; many have marvelled that so little care and attention have been bestowed at the outset to construct churches upon even the most commonplace principles of hygiene. The gas—which is almost invariably placed low down over the heads of the people—owing to the large amount consumed, aids materially in the air pollution. No provision is made to supply fresh air which has been previously warmed, and hence, for the greater part of the year, the inevitable old lady or gentleman who is possessed of a special faculty of detecting an amount of air movement which an anemometer would barely be sensitive to insists upon all ventilating openings (often only doors and windows!) being shut. Further, so as to make matters as bad as they possibly can be, and so as to insure that air shall not be induced to enter by any circumventive tactics, no means of outlet (or at least very inefficient ones) are provided for the escape of foul air. It would have been easy to achieve good results in the first instance, since the matter only entails the application of a few measures which are well understood and often adopted; but after construction the best remedial steps involve considerable difficulty and expense. Provision should be made in every case for warming the entering air, preferably by hot-water pipes, since the building itself is best heated by these means; and the warm air may be best admitted by small gratings at the bottom of the walls near the floor, and

through perforations in the flooring of the different passages. Gas should be placed high, and not used to heat the building, and the jets might be disposed in rings, around openings leading directly to the external air, so that the heat generated may be utilized as an agency for extracting air vitiated by the congregation, while at the same time the injurious products of gas combustion are at once removed. Extraction shafts leading into the furnace-flue, and having their openings well above the gallery level, might also with advantage be placed in each corner of the building.—*Brit. Med. Jour.*

UNIVERSITY COLLEGE HOSPITAL—REMOVAL OF THE SUPERIOR MAXILLARY NERVE.—Mr. Victor Horsley excised the right superior maxillary nerve of a woman, æt. 45, for intense neuralgia. He said it was a good sign in this case that the disease was fairly localized. Ten years ago the patient had suffered from a very slight attack, which very soon passed away, the real malady commencing only three years ago. In his opinion it was far better to operate comparatively early, as then all the branches of the nerve are not affected. He stated it was feared at one time that a change took place in the roots of the teeth after excision of the nerve, but this is not the case. In the present instance there was no evidence that the disease involved any branch but the middle division of the fifth; the patient was very neurotic, requiring an enormous amount of anæsthetic, as these cases always do. The first step of the operation was to stitch together with horsehair the lids of the right eye; a horizontal incision was then made along the lower margin of the orbit, care being taken not to enter that cavity, and a vertical cut parallel to the nose carried down for about an inch and a half nearly from the centre of the first; the periosteum was then elevated and the nerve discovered emerging from the foramen; an effort was made to separate the artery from the nerve; to do this, Mr. Horsley pointed out, was a great advantage, but it was not easy, and was not possible in the present case, so the artery was ligatured and a piece of silk put round the nerve, then the periosteum was turned up from the floor of the orbit, the eyeball being held up with a copper retractor. (Mr. Horsley said *en passant* that a thin elevator was required; the original performer of this operation used a cup-shaped one.) The infra-orbital canal was next opened up with bone nippers; an electric light attached to the operator's forehead being now brought into requisition, the anterior dental was brought into view and about two inches of the superior maxillary nerve were excised. All small vessels were ligatured, hot perchloride solution was applied, and the wound sewn up with horsehair, one angle being left unclosed, as there had been a good deal of oozing and there probably would be more, as Mr. Horsley pointed out, remarking that he generally in these cases closed the wound up entirely.—*Medical Press and Circular.*

THE
Canadian Practitioner
A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, APRIL 16, 1892.

THE RETAIL DRUGGIST.

An article on the above subject recently appeared in the *Medical News* which refers more especially to the position of the pharmacist in the United States, but is not any the less interesting to us in Canada on that account. It quotes from the *Druggists' Circular* the following paragraphs referring to counter-prescribing:

"In this and other States there are very stringent laws to prohibit counter-prescribing by druggists, and as our medical brethren have spies constantly on the lookout, and a number of arrests have been made, it is of the greatest importance that all pharmacists should be on their guard. There is, however, no law under which a druggist could be arrested or fined for selling a friend or customer what they called for, and in order to meet this difficulty a little book entitled 'A Medical Manual for the Treatment of Simple Diseases' has been carefully prepared.

"This work, which is carefully arranged in alphabetical order, gives the patient all the information he would most likely ask the druggist for, and which the pharmacist is not now in many places allowed to supply orally.

"The publication of this useful and valuable book is one of the most important events in the drug trade that has transpired in many years."

We don't know whether our numerous counter-prescribers in Toronto use this valuable book; but, if not, we may tell them that the retail price is twenty-five cents. We don't know that there is any reason why they shouldn't have all information which is available in this important art. A number clubbing together can get greatly reduced rates. It is quite likely that this "useful and valuable book" will become popular with the public as well as the *profession*.

Even from a druggist's point of view, however, there is some danger of overdoing the counter-prescribing business. Physicians have been for some time considering the matter, and many are now dispensing their own medicines, and more are likely to do the same in the near future. We believe the losses thus resulting to the druggists will more than balance the profits derived from their unlawful counter-prescribing.

The *News* points out another aspect of the case as follows:

"There is another reason that will, in the future, continue more powerfully to hasten the downward progress of the druggist's calling as a learned profession. This is the gathering of the art of compounding drugs into the hands of the manufacturing chemist, and the resultant concentration of this function under the control of a few large firms. Machinery, centralization, systematization, and the progress of pharmacology have made it possible to compound vast quantities of almost every conceivable prescription with an accuracy that is greater and at far less expense than is possible in the case of a single prescription for a single patient. The wholesale manufacturer, moreover, passes by and over the retail druggist, supplies the physician directly, and the physician, finding it to his own benefit as well as to that of his patient, will more and more supply his patient at first hand."

This is no fancy sketch of impossible or improbable contingencies, but a clear statement of what is quite likely to happen before long. Under such circumstances the commercialization of this profession, as the *News* points out, will become still more marked; and the drug store will become a sort of "soft-drink saloon or junk shop" where all kinds of "queensware, bric-a-brac, patent medicines, fizz-waters, cigars, ginger snaps, and milk shakes" may be procured at the lowest possible prices.

THE MEDICAL COUNCIL AND THE PROFESSION.

The Medical Council of Ontario has received some hard hits during the last few months from various members of the profession throughout the province. We regret that many of its critics have shown an amount of bitterness which is quite uncalled for, and is not likely to accomplish much good. We must, however, recognize the fact that many acts of that body have not met with the approval of physicians whose opinions are worthy of careful consideration. We regret that the recent discussions have shown that a large portion of the profession have taken so little interest in the proceedings of the Council in the past that they know but little about the merits or demerits of the work it has accomplished.

We desire to give our readers the fullest possible information about its position in connection with recent legislation in the Ontario Parliament; and, with that object in view, publish in this issue the address of Dr. Angus McKay, of Ingersoll, delivered in the House of Assembly on the occasion of the debate on the proposed amendment to the Medical Act, and a portion of the address of Dr. Rogers, of Ottawa, delivered at the meeting of the Bathurst and Rideau Medical Association, July 15th, 1891.

Dr. Rogers, as a member of the Council, may not be considered a disinterested party; but he certainly gives many facts which will be read with interest by all who desire to see our educational standards raised. Dr. McKay may be considered a representative of the profession as a whole—and an able and worthy one he is—and his opinions, so well expressed, are entitled to careful consideration. It is only just to Dr. Meacham to say that he expressed his

views well, having evidently given the subject careful study, and it is right to add that he represents a large and powerful section of our physicians. We regret that we are not able to give an exact résume of his address on the subject, but we would be happy to place our columns at his disposal if he would do us the favor of sending a communication on the subject.

We are glad to know that there is a growing feeling that the Council should be maintained. With all its faults—supposing it to have faults—it has done signal service to the profession of Ontario. Dr. Rogers puts that aspect of the case very clearly. By the way, what a pity it is that this champion of high standards cannot express himself without throwing out offensive insinuations against certain of his confréres who deserve no such treatment? While the majority will uphold the Council, it is remarkable to find such a strong feeling against the universities and medical colleges. There is nothing new in this, however, as the records of the various sessions of the Council show that all is not *lovely* between the territorial representatives and certain of the "schoolmen." We will return to this subject in a future issue. Many are inclined to favor that clause in Dr. Meacham's proposed amendment calling for an election every three years. Probably the worst feature of the whole agitation is the strong feeling which has been shown against the two-dollar tax. Many have urged certain reasons for opposing it which are at least intelligible; others, unfortunately, have shown a willingness, if not an eagerness, to sign any petition which will relieve them from "this burden," without the slightest consideration for any obligations resting upon the profession in the shape of debts. It was this disposition on the part of a few (we hope) that led so many laymen to think the medical profession of this province were a "mean lot."

SPECIAL COURSE IN BACTERIOLOGY.

Prof. Ramsay Wright will conduct a practical course in bacteriology in the Biological Department of the University during the month of May.

The course will consist of a lecture each morning at nine o'clock, after which the members of the class will engage in practical work in the laboratory for as many hours as they can spare.

It is intended that the course shall cover the life history of the chief pathogenic forms, the experimental methods employed in studying these, and the applications of bacteriology to diagnosis.

Each member of the class will have the use of a microscope (including homogenous oil-immersion lens) and the other appliances necessary for the work. The requisite experimental animals will also be furnished.

As it is necessary to make further arrangements in advance, it is requested that those proposing to take advantage of the course should communicate with Prof. Wright at once.

The fee for the whole practical course, including the appliances and materials for study, is $25; for the lectures alone, $5.

A DISHONEST BOOK AGENT.

A correspondent from Brantford informs us that he has been victimized by a party representing himself as the agent of the Home Supply Association of Chicago. Our friend subscribed for the *New York Medical Journal* and the *Archives of Gynecology and Obstetrics*, and paid for one year in advance. As the journals did not come to hand he wrote to the company, and received the following reply:

"Your favor of the 6th instant at hand. We regret to inform you that you have been the victim of a sharper. Mr. John D. Martin is not in our employ, and we do not know him only as various physicians have reported him to us as you have done. He has worked Indiana and Michigan in the same way that he is now working Canada. We have detectives on his track, and should be very glad if you were able to assist us in apprehending him. It is unnecessary to say that we have not received a penny of his collections. We regret this unauthorized use of our name, but feel sure that, after reading this letter, you will hold us guiltless in the matter.

"HOME SUPPLY ASSOCIATION."

Chicago, April 8, 1892.

Meeting of Medical Societies.

PATHOLOGICAL SOCIETY OF TORONTO.

February 27th, 1892.

The society met in the Biological Department, the vice-president, Dr. A. McPhedran, in the chair.

ULCERATIVE ENDOCARDITIS.

Dr. G. A. Peters presented the heart and specimens of the lung, liver, kidney, and spleen, and read the following history:

A. H., aged eight, had an abrasion of the outer side of the heel of some weeks duration. This was followed by swelling and suppuration of the lymphatics, extending from about the middle of the calf of the leg on the inner side to within two inches of the groin in an almost continuous tract. The suppurating foci were opened washed out antiseptically, and drained freely.

The temperature before operation was 100⅖°, pulse 120. Within thirty-six hours the temperature had dropped to normal, and the pulse to 104.

The wounds were washed out antiseptically once a day, and at no time was the discharge profuse, nor did any accumulation of pus ever take place. Nevertheless, the temperature continued to rise by gradations of about one degree daily until on the eighth day after admission it had reached 103⅖°, the pulse ranging from 100 to 140. On the fourteenth day the temperature was 105°, pulse 156. The temperature ranged from 101° to 105° during the next two days, and death took place on the sixteenth day after admission.

He suffered once or twice from retention of urine, and at all times was irritable and intolerant of being touched. There seemed to be hyperæsthesia over all the body. There was slight cough, but no expectoration could be obtained. The urine was loaded with urates, but contained no albumen until two days before death. Delirium was present during the night for about a week preceding death, but there was never complete unconsciousness nor coma. He had no distinct chills during course of disease.

Three days before death a friction sound could be heard in the pleuro-pericardial region, and the next day a soft blowing murmur at the base of the heart.

There was slight dullness on percussion over the bases of the lungs shortly before death, and moist bronchial sounds could be heard. The area of splenic dullness was increased.

Autopsy.—External wounds were clean, but showed no granulating surfaces. There were accumulations of pus in connection with them. The inguinal glands were only slightly enlarged.

Abdomen.—Spleen somewhat enlarged and softened. Liver, kidneys, and intestines showed no change to gross examination. The mesenteric glands were enlarged, but not softened or inflamed. The retro-peritoneal glands were slightly enlarged.

Chest.—Lungs did not retract fully on opening the chest. There was recent pleurisy on both sides, with considerable inflammatory lymph and slight adhesions, but no accumulations of pus. In both lungs were found numerous infarcts, especially around the margins. Some of these were dark-red, almost black, in color, and firm. In others there were some broken down patches, and in a few fully formed abscesses. The largest was not more than three-fourths of an inch in diameter. The lung, as a whole, floated in water. There was no pericarditis, and only a small amount of fluid in the pericardium. On the right side of the heart there was a distinctly ulcerated patch about three-sixteenths of an inch in diameter upon the auricular surface of the tricuspid valve. All around the margins where the valves came into contact, there were numerous minute jelly-like excrescences. Similar excrescences were found in smaller numbers on the mitral valve, but there were no ulcers on the left side of the heart.

Dr. W. R. Shaw presented tube and plate cultures, smears, and stabs, made from the heart and intestine, showing colonies and pure cultures of the streptococcus pyogenes. This was the only pathogenic microbe present. He presented also, under the microscope, a stained cover-glass preparation of the pure culture.

Dr. John Caven had made microscopic preparations of the various organs, but owing to illness was unable to present them.

Dr. Acheson asked if these pulmonary lesions were what are commonly called hemorrhagic infarcts of the lung, or were they not rather an

early stage of pyæmic abscesses just beginning to break down, the result of septic emboli? Some pathologists hold that the hemorrhagic infarct of the lung was quite different in its mode of origin from infarct in the spleen or the kidney; the latter being the result of non-septic embolism, while the pulmonary infarct was a true hemorrhage and not embolic. The embolic infarct contained no blood, and was pale in color, except in the inflammatory area around the periphery. The wedge shape of the pulmonary infarct was to be accounted for by the mode of branching and distribution of the bronchi in the connective tissue of the organ, thus causing the extravasated blood to occupy a wedge-shaped area. True infarcts were always the result of non-septic emboli, while septic emboli gave rise to pyæmic abscesses.

Dr. Primrose said he would like to know the pathological difference between *septicæmia* and *pyæmia*. Clinically, this was one of pyæmia; its progress was slow and there were metastatic abscesses. In septicæmia the clinical course is much more rapid; there may be small hemorrhages in various parts, but no abscesses. The pulmonary infarcts here he regarded as the first step in the development of abscesses

Dr. McPhedran thought there was no radical difference between pyæmia and septicæmia; they were really varieties of one condition. Although these cases of ulcerative endocarditis generally prove rapidly fatal, yet they may run on for from six to eight or twelve weeks with remittent pyrexia. He mentioned several cases that had come under his own observation where there was such a prolonged history of ulcerative cardiac lesion, and he thought there was a chronic as well as an acute ulcerative endocarditis. This case was uncommon in having the ulceration on the right side of the heart. The presence of a pulmonary lesion is unusual, but was to be expected here. He asked if there had been any chills, and what was the cause of the albuminuria. Many cases have no albumen in the urine.

Dr. Acheson said he thought there was a distinct pathological difference between *septicæmia* and *pyæmia*. In septicæmia there was merely the absorption of the toxic products of micro-organisms into the blood, but no actual transference of pus-producing organisms from the primary lesion and subsequent lodgment of these in the tissues and organs at a distance, with the resulting metastatic abscesses. In pyæmia there is such an actual transference, giving rise to new foci of microbe development and tissue necrosis. In other words, there is multiple septic embolism and metastatic abscesses.

Dr. Primrose said that in septicæmia pathogenic micro-organisms were found freely circulating in the blood.

Dr. Acheson admitted this, but said that, although circulating in the blood, they did not multiply there to any great extent, nor did they invade the tissues at a distance from their primary source, settle down there, multiply, and cause necrosis. In one sense, septicæmia and pyæmia were only varieties of one condition—an intense toxæmia of microbic origin; but there were the two ways in which this might be produced easily distinguishable. Pyæmia was a more serious condition than septicæmia.

Dr. Oldright asked why the left side was more frequently the seat of ulcerative endocarditis than the right.

Dr. McPhedran said that the usual explanation given was that the left side was more subject to strain; abrasions of the endocardium were thus more likely to occur on the left side, and these gave entrance to the micro-organisms. Perhaps all forms of endocarditis, simple and ulcerative, were of micro-parasitic origin.

Dr. Peters, in reply, said he thought pulmonary infarcts were of embolic origin; they had been produced experimentally by mechanical non-septic emboli. The blood contained in them was due to regurgitation from the surrounding vessels which anastomosed with those in the area of distribution of the occluded vessel. If the emboli were aseptic, the infarcts would be gradually absorbed, leaving cicatrices; but if they were septic, abscesses would result. In regard to septicæmia and pyæmia, he thought the distinction made by Dr. Acheson was a good one; but he believed that septicæmia sometimes developed into pyæmia. The element of physiological resistance was an important one; the organs in septicæmia might be circulating in the blood, but owing to the resistance of the tissues at first they found no suitable nidus; after a time, however, the physiological resistance becomes so lowered by the

toxic condition that the micro-organisms are able to obtain a foothold, and pyæmia is the result. There had been no rigors in this case, but the patient had occasionally complained of feeling chilly. The albuminuria was very small in amount, and was due, perhaps, to cloudy swelling in some parts of the kidney. Death was due to sepsis.

TUCERCULAR DISEASE OF HIP-JOINT.

Dr. Primrose presented sections of the head and neck of the femur from two cases of this disease, and made the following remarks:

In each case he had performed the operation of excision of the joint.

Case 1 was that of a boy, aged six, who had first exhibited symptoms of hip-joint disease five months previous to operation. An abscess had developed and presented a fluctuating swelling on the anterior and inner aspects of the thigh. On opening the joint the head of the bone was partially eroded, and on removing the head a portion of the articular cartilage, round about the eroded surface, was lying loose, detached from the bone beneath. The acetabulum was perforated, and the synovial membrane of the joint was thickened and gelatinous in consistence. A longitudinal cut was made through the piece of bone removed, and it was then noted that the epiphysis was pale yellow in color, and the cancellous tissue there was very friable. The diaphysis, on the other hand, was deep red and congested, but otherwise normal. The epiphysial cartilage presented a normal appearance, and existed as a very definite line of demarcation between the congested bone of the diaphysis and the pale-yellow tissue of the epiphysis. The microscopic section of this bone exhibits an undue amount of fat in the cancellous tissue of the epiphysis and a thinning of the bony trabeculæ, whilst there is evidence of inflammatory exudation of round cells in the diaphysis immediately underlying the epiphysial cartilage. There are no tubercles to be found in either diaphysis or epiphysis; the cartilage presented a normal appearance.

Case 2. The operation of excision of the hip-joint was performed in a girl, aged ten, two months after the first occurrence of symptoms of hip disease. The head of the bone was eroded, the synovial membrane was thickened and gelatinous; the acetabulum was apparently healthy, with the exception of a very small amount of erosion on its superior border. In this case, on longitudinal section, the epiphysial cartilage formed a dividing line between the deep red cancellous tissue of the diaphysis and the paler tissue of the epiphysis, although there was not such a marked contrast as in Case 1. On microscopic section, the undue amount of fat in the epiphysis was noted in this case also, and the same inflamed condition of the bone below the epiphysial cartilage was observed. In this case, however, was found a group of tubercles in the anterior inferior portion of the epiphysis, just in the angle of junction between the epiphysial and the articular cartilage. The typical giant cells were present in the midst of surrounding cells of irregular outline.

These two cases represent the conditions found fairly early in the disease. Case 1 is an example of the disease beginning in the acetabulum; the condition of rarefying osteitis in the epiphysis and the partial destruction of the articular cartilage occurring secondarily to the development of the disease in the acetabulum. In Case 2 the disease was primarily in the femoral epiphysis, and the operation was performed before an extension of the disease to the acetabulum had occurred. In both cases the epiphysial cartilage appeared as a fairly effective barrier to the inroads of the disease upon the diaphysis. No doubt the inflammatory condition beneath the epiphysial cartilage, however, was a precursor of an extension of the disease to the diaphysis with destruction of the epiphysial cartilage, which would have occurred sooner or later had the diseased tissues not been removed.

The usual situation of the primary deposit of tubercle, when the primary seat of the trouble is in the bone, is (according to Mr. Watson Cheyne*) at the lower part of the femoral neck, just *outside* the epiphysial cartilage. It would appear, therefore, that the section exhibited demonstrates the presence of a primary tubercular deposit in an unusual situation.

After transacting various items of general business, the society adjourned.

* Brit. Med. Jour., April 4, 1891, p. 739.

Personal.

DR. KITASATO, a worker in Koch's laboratory for many years, is about to leave Berlin to open a bacteriological institute in Tokio. Prof. Ramsay Wright frequently referred to his investigations in his letters to THE PRACTITIONER last year.

DR. D. HAYES AGNEW, the well-known surgeon of Philadelphia, died March 22nd, in the 74th year of his age.

DR. C. A. Temple, one of the interne assistants in the Toronto General Hospital, has been appointed surgeon to the Empress of India, one of the new C.P.R. steamships.

DR. OSLER, of Baltimore, visited Toronto, April 11th, and remained a couple of days.

Obituary.

JAMES ROSS, M.D., TORONTO.—Those who were students of medicine in Toronto thirty-five years ago will remember that Dr. James Ross was then one of the leading physicians of the city. To many such, and others coming later to Toronto, it was a source of surprise that at the time of his death the doctor was only sixty years of age. It must be remembered, however, that he commenced practice in this city when only a boy of twenty, and, notwithstanding his youth, rapidly forged to the front. Though young in years on graduating, he had received a thorough and excellent training. After taking the regular courses of lectures, he became a licentiate of our old medical board in 1851. After this he spent one session in Jefferson College, Philadelphia, where he graduated in 1852, receiving the degree of M.D.

In May of that year he settled in Toronto, and during his forty years of practice did more hard work than any man we know of in our profession. He appeared to have a constitution of iron, and he never seemed to have any idea of taking care of himself. He loved his work, and probably sacrificed twenty or thirty years of his life through his devotion to it. Although he was, in the broadest sense of the word, a general practitioner, he had a special reputation in obstetrics and diseases of children. It will be remembered by some that in 1877 the late Dr. Zimmerman published an analysis of 4704 cases of midwifery which Dr. Ross had attended during the previous twenty-five years. His total number of cases attended during his forty years of practice was 6787, the date of the last being March 26, six days before his death. About the middle of January he had a severe attack of la grippe, from which he never fully recovered. He contracted pneumonia, March 28, and, although only a portion of one lung was involved, he sank rapidly, and died early on the morning of April 2nd.

He always took considerable interest in public matters, and was for a number of years a member of the city Board of School Trustess. He was the representative of the Midland and York Division in the Ontario Medical Council from 1874 to 1880. Among the other honors conferred upon him by his medical confréres was the presidency of the Canadian Medical Association, which he held in 1890. He was a sound, good, "all-round" practitioner, endowed with excellent judgment, kindly tact, and rare patience; and he leaves a vast army of patients, ex-patients, and other friends, in and out of the profession, who will long mourn the loss of him whom they had learned to love. His wife died about two years ago. She had been ever truly devoted to her children, and an invaluable assistant to her husband in every way. It is said that Dr. Ross never fully recovered from the blow he received in her loss. There are left in the family one daughter and two sons, one of whom is Dr. James F. W. Ross, of Toronto.

Births, Marriages, and Deaths.

MARRIAGES.

ROBERTSON—MONTEITH.—At Sunnyside, the residence of Mr. Nelson Monteith, brother of the bride, on March 30, by Rev. G. R. Beamish, M.A., W. Norrie Robertson, M.D., and Jennie A., youngest daughter of the late Samuel Monteith, Esq., of the Gore of Downie.

Miscellaneous.

GRADUATES IN MEDICINE, 1892.

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, KINGSTON.—H. R. Adamson, Ottawa; J. Adams, Kingston; G. T. C. Adams, Sydney, N.S.W.; T. A. Balfe, Smith's Falls; A. E. Barber, Palmersville; W. J. Belton, Clayton, N.Y.; Miss M. E. Bermingham, Kingston; F. H. Bermingham, Kingston; T. C. Bourns, Addison; J. D. Bisonnette, B.A., Burnbrae; H. H. Denaut, Delta; H. E. Douglas, Napanee; J. C. Gibson, Atwood; W. G. Hare, Iroquois; Miss Mabel Henderson, Brockville; Allison Jamieson, Wycklow; J. J. Kelly, B.A., Nepean; J. Kirk, B.A., Kingston; E. J. Lent, Picton; A. Lockhart, Kingston; E. J. Melville, Howe Island; F. J. McCammon, B.A., Kingston; R. R. Robinson, Consecon; T. B. Scott, B.A., Belleville; D. V. Sullivan, B.A., Kingston; Miss Nellie Skimin, Hamilton; G. W. H. Smith, Sydney, N.S.W.; N. T. Stevens, Athens; Miss Agnes Turnbull, Kingston; H. E. Tuttle, Iroquois; W. B. Thompson, Kingston; J. W. Wheeler, Wolfe Island; Isaac Wood, B.A., Kingston.

MCGILL UNIVERSITY, MONTREAL.—G. A. Brunette, G. A. Berwick, J. E. Binmore, G. A. Bowen, B. F. Boyce, F. W. A. Brown, J. E. Brouce, D. A. Bruce, H. B. Carmichael, J. L. Chabot, R. J. Chipman, A. R. A. Day, C. W. Guilleston, R. F. Glendenning, W. C. R. Graham, H. A. Grant, Y. Halliday, P. O. Hayes, J. Hogg, H. J. King, F. A. Long, A. F. Longley, A. E. A. McCann, D. Y. McKay, J. E. McKenty, R. F. McKenzie, O. Y. McKinnon, H. A. McMally, A. W. Muir, C. F. Martin, T. H. Martin, W. B. H. Massiah, J. Peak, E. D. Phelan, B. E. Robinson, W. Rodger, W. H. Smith, W. M. Taplin, T. T. Taylor, J. N. Taylor, J. Thompson, A. S. Wade, W. E. Walker, W. G. Walker, H. G. Wasson. Honor list on final subjects: Jameson, Henderson, Massiah, Day, C. F. Martin, Wasson, Hayes, J. T. Taylor, Chabot, Chipman, Walker, Wade, Bowen, Berwick, Boyce. Prize list: Holmes medal, Thomas Jameson. First prize, James Henderson.

WESTERN UNIVERSITY, LONDON.—Honors: Gowan, H. McDonald, McGregor, Gubbins, Shaw, Hughes, McGinnis, F. Fraleigh, McEwen. Burkholder; pass, Cook, Halliday, McGuffin, Patrick, Nixon, Hall, Wood, Johnson, F. Noyes, Parker, H. Noyes, Banting, McIntosh. Medals—Gold medal, H. F. McDonald; silver, L. J. Gowan.

AMERICAN ACADEMY OF MEDICINE.—The following is the preliminary program for the seventeenth annual meeting of the American Academy of Medicine at the Cadillac Hotel, Detroit, Mich., on Saturday, June 4, and Monday, June 6, 1892: (1) "Essentials and Non-essentials in Medical Education," the address of the retiring president, Dr. P. S. Conner, of Cincinnati. (2) "The Value of the General Preparatory Training Afforded by the College as Compared with the Special Preparatory Work Suggested by the Medical School in the Preliminary Education of the Physician," a paper by Dr. T. F. Moses, of Urbana, Ohio. (3) "Does a Classical Course Enable a Student to Shorten the Period of Professional Study," a paper by Dr. V. C. Vaughan, of Ann Arbor, Mich. (4) "The Value of a Collegiate Degree as an Evidence of Fitness for the Study of Medicine," a paper by Dr. L. H. Mettler, of Chicago. (5) The Value of Academical Training Preparatory to the Study of Medicine," a symposium, by Drs. H. B. Allyn, of Philadelphia, W. D. Bidwell, of Washington, and Elbert Wing, of Chicago. (6) "The Newer Medical Education in the United States," a symposium by Drs. W. J. Herdman, of Ann Arbor, Charles Jewett, of Brooklyn, and Elbert Wing, of Chicago. (7) A paper on some phases of the "State Supervision on the Practice of Medicine," by Perry H. Millard, of St. Paul. Some other papers are partially promised, and the usual reports may be expected from the committees. Members of the profession are cordially invited to be present at the sessions of the Academy.

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Original Communications.

THE ETIOLOGY AND TREATMENT OF ECZEMA.*

BY J. E. GRAHAM, M.D.,

Professor of Clinical Medicine and Dermatology, University of Toronto.

When your secretary honored me by the request to read a paper before this Association, I thought I would be able to present one of some little originality, at least from a clinical standpoint. Owing, however, to a variety of engagements, I could not find time to prepare such a paper, and concluded instead to give a plain talk on the etiology and treatment of eczema. Many of you will, no doubt, be quite familiar with the methods of treatment which will be given; but it may be of service to us all thus to review our knowledge of this very practical subject.

Eczema is a catarrhal inflammation of the skin, which, like other inflammatory processes, is due to some form of irritation. This irritation may be either of internal or external character, and it may be here stated that the internal are usually the predisposing and the external the exciting causes of the disease. An abnormal condition of the digestive and assimilative functions is one of the most frequent causes. Dyspepsia and constipation are often found in eczematous cases. In these conditions toxic products are, in all probability, reabsorbed and produce a poisoned state of the blood. Malassimilation is also a frequent condition. Products not sufficiently oxidized circulate in the blood, probably as uric and oxalic acid, which, with other less known bodies, act as irritants in the causation of eczema. Faulty excretion, by the retention of toxic agents, acts in the same way. From these considerations it will not be surprising to find eczema present in cases of glycosuria and albuminuria. Some years ago I had under observation a case of almost universal eczema in a child which demonstrated the connection which often exists between this disease and the formation of uric acid. The child was strong and healthy until two years and a half old, when symptoms of indigestion appeared; these were soon followed by a rash upon the skin, accompanied by severe itching; then the kidneys exhibited signs of irritation, as shown by pains in the back and frequent desire to micturate. The child remained in a wretched condition for many months. The irritation of the skin was extreme; in fact, an almost universal eczema. Symptoms of dyspepsia were present. The urine was at times albuminous, and always contained an excess of uric acid. It was noticed on several occasions that when an exacerbation of the skin affection occurred, the irritability of the bladder increased and an immense amount of uric acid was discharged. Crystals in large quantities would form as soon as the urine cooled. Another curious fact was also noticed, viz., when soothing applications succeeded in lessening the irritation the quantity

*A paper read before the Huron Medical Association, Oct., 1891.

of uric acid diminished. It would thus appear that a very close relationship existed between the condition of the skin and the formation and excretion of uric acid. After about a year's treatment the patient became perfectly well, and is now a strong and healthy girl.

A class of cases in which we find eczema frequently is made up of those who eat and drink too much and who take too little exercise. They are plethoric and have a tendency to the formation of fat, and present frequently a more or less sallow appearance. If such persons are in the habit of drinking beer, the digestive function will be much impaired; foul tongue, occasional attacks of mild catarrh of the stomach, and more or less jaundice are very frequent symptoms. In such cases there exists constantly a great strain on the excretory organs to rid the system of excess of sub-oxidized substances; and if those organs become deranged, this excess in the blood is still greater. Neurasthenia is frequently the cause of attacks of eczema. Owing to a depressed state of the nervous system, the functions of digestion and assimilation are improperly performed, and we have as a result a poisoned state of the blood. In this class of cases, although the result, so far as the blood is concerned, may be similar to that of the plethoric conditions, the cause is very different, and the treatment must, therefore, be different also. It is very probable that the oxidation of food products in the blood is largely accomplished in the liver, and that, therefore, this organ is frequently deranged in case of eczema. I am quite conscious of the fact that in thus speaking of the internal causes of eczema a good many indefinite terms have been used, but we cannot help using them until we obtain more accurate knowledge of the physiological and pathological processes connected with digestion and assimilation. We must also remember that the careful observations of the clinicians have usually led the way to the discovery of great pathological facts. The view that eczema is ever hereditary is now somewhat questioned. I am positive that I have seen many cases of a hereditary character, notably in one family, where I know it to have existed in four generations. In gout and rheumatism eczema is often present as well as that condition which Dr. Murchison called lithæmia, a condition which I have to some extent already discribed. Bulkley states that eczema and asthma often exist together. I have frequently seen asthma and ichthyosis in the same patient; and as the latter condition predisposes to eczema, this may account to some extent for the concurrence of the two diseases. Very often when an eczema has arisen from purely local causes the skin takes on a diseased habit, and the abnormal condition will continue long after the local cause has been removed. This will often account for the continuance of an eczema in a patient whose functions are quite healthy. Dentition, although rarely the cause of an eczema, frequently precedes an exacerbation of the disease and assists in prolonging it. A reflex irritation of the nerve centres is frequently the immediate cause of an eczema. This may come from the intestinal tract, uterus, or, as Crocker says, from the skin itself. Dr. Jamieson thinks that the abuse of tea is a fruitful cause of eczema. The ingestion of such indigestible food as cheese, salt meat, etc., acts as cause by reflex influence. Vaccination may be the cause of eczema.

The local or external causes of eczema may briefly be stated to consist of sudden changes of temperature, exposure to cold and dampness, chilling of the surface, chemical and mechanical irritants, including parasites. It has, of course, been long recognized that such parasites as pediculi, acari, etc., are frequent causes of eczema. More recently it has been shown that the vegetable growths are a frequent cause of the prolongation of an eczema, and sometimes of the origin also. That form described by Unna as seborrhœic eczema is always parasitic. The parasitic element in the local causation of eczema must always be taken into consideration in the treatment. An eczematous surface is, without doubt, a good soil for the growth of various forms of bacteria. Uuna, however, in my opinion, goes too far when he makes the statement that eczema is always of parasitic origin. Various trades and occupations are often the cause of eczema, and, although we know this to be a fact, we sometimes omit to make enquiries upon the point. Articles of domestic use, such as soaps, are often a cause of this disease. I remember the case of a family of children who suffered from eczema,

where I found they used a coarse form of hard soap. When they ceased using this the disease disappeared. In undertaking the treatment of an obstinate case of eczema, it is absolutely necessary that a careful study of it should be made in all its aspects. The various organs of the body should be examined to find out if there is either organic or functional disease. The habits of the patient as to eating, drinking, and the amount of exercise, should be inquired into. As a general rule, facts will be brought out by such an examination which will be of great importance in the management of the case. Indigestion, a condition so often found, must be carefully treated. The regulation of the diet, excluding such articles of food as are known to disagree, is in all cases necessary. In such plethoric patients as I have described, a complete change in the methods of living may require to be enjoined. Less food, and that of a plainer character, with increased exercise, may be advised. In cases of flatulent dyspepsia it may be necessary to exclude starchy food, and to place the patient upon the scraped beef and hot water diet. In this way fermentation is prevented. Nearly all of these cases are complicated by constipation, and remedies for the latter have an excellent effect upon the dyspepsia. The most frequent aperient I use is from that simple formula which is associated with Starkin's name: R. Magnes. sulph. 3i., ferri sulph. grs. iii., acid sulph. dil. mx, in combination with a simple bitter infusion. This taken half an hour before breakfast in a half tumbler of hot water has an excellent effect. In place of this other aperients may be used, such as Carlsbad salts, Hunjadi Janos water, cascara, or the pulv. glycyrrhizæ co. Calomel in ¼ gr. tablets, one given at night two or three times a week, has a favorable action on the liver. Bulkley's prescription of potas. acetate. and tr. nux vomica is a very useful one. In those neurasthenic cases a similar condition of the bowels may be found, which must be treated in the same way. It will be found necessary in such cases to find the cause of the neurasthenic condition and remove it. At the same time measures must be adopted for building up the system, such as massage, rest, and the internal administration of the phosphates and arsenic. The pure phosphorus is an invaluable remedy in such cases if the stomach will bear it. In gouty cases pot. iod. and lithia may be given in addition to other remedies indicated. As to the question of diet in the treatment of eczema, much difference of opinion has arisen. It may be stated, as a general rule, that such articles of diet as are known to derange the stomach, such as pickles, pork, and pastry, must be interdicted, and that such as are known to build up the system enjoined. No rule can be laid down. One patient may take too much meat, and this must be either lessened or excluded. On the other hand, another may take too much starchy food, and it may be necessary to exclude this. We can only come to correct conclusions by carefully studying each case.

In infantile eczema the management of the diet is the principal part of the treatment of the case. I may safely say that I have seldom met with eczema in children where I have not, upon enquiry, found grave errors in diet. It would be impossible for me to go into the subject at present, any more than to say that such general rules must be followed as will support the child, and at the same time avoid irritation of the digestive tract. As a remedy for such irritation, Dr. Crocker recommends the following mixture: R. Sodæ bicarb, grs. v.; spts. chloroform, m. i.; aq. anetni 3i. For a child a year old, hydrar. creta may be given in one grain doses three times a week.

It is impossible in a paper such as this to go into a description of the many forms of treatment necessary in such a variety of cases. I have, however, said enough to indicate that abnormal conditions of the internal organs must be sought for, and if possible remedied. Now, as to specific remedies, arsenic has had the greatest reputation. Not so many years ago it was used altogether too freely, and it is now a question if the pendulum does not swing too far in the opposite direction. In the dry and scaly form of this disease, arsenic is certainly beneficial, and in some of the moist forms, when the disease depends on malaria, this remedy has also a good effect. It is certainly safe to say that in proper cases arsenic has a positive effect in the cure of eczema. It should, of course, not be given in acute inflammatory conditions.

In the eczema of children, particularly in those of an anæmic character, cod liver oil is almost

a specific, and it is sometimes surprising that so nauseous a remedy is so well borne by the stomach. Antimony has been recommended by Malcolm Morris, and Dr. Piffard speaks highly of the use of the viola tricolor. Spts. terebinthum in from ten to fifteen minim doses has been strongly recommended by Dr. Crocker. The latter authority recommends counter irritation over the spine in cases in which the vaso-motor system appears to play an important part.

In the local treatment of eczema, care must be taken to fully appreciate the abnormal condition present and to suit the remedy to each case. If there is excessive irritability, soothing applications and protection from the air may be indispensable. If, on the other hand, a low, indolent process is present, stimulation may be necessary.

Again, if there is much induration, due to the organization of inflammatory products, remedies to remove this may be required.

The external remedies may therefore be divided into sedative astringents, protectives, alteratives, absorbents, and anti-pruritics. In many cases the same remedy may be sedative and protective, thus belonging to more than one class.

A preparatory treatment is necessary in those cases where the surface is covered by scabs or scales. These may be best removed by the plentiful use of oil and a poultice, or by the application of a saturated solution of boracic acid. In the most irritable forms of acute eczema, powders are preferable to any other form of application. They may be applied by dusting the surface or by means of powder bags. The use of the latter was suggested by Unna. They are made of fine cambric, and of a shape and size suitable to the part to which they are to be applied. They are filled with fine powder and quilted across so that the contents will not be easily moved from one part to another. They are of most service in cases where it is necessary to keep two raw surfaces apart; for instance, under the breast or in the folds of the groin. A constant powder application is thus made. The powders used most frequently are: Pulv. amyli, pulv. talci, acid boracic, zinci oxidi kaolin, oleate of zinc, and acid salicylic. By using various combinations of these a drying, protective, or astringent and antiseptic effect may be produced. It is absolutely necessary that the powder should be very fine and should not contain any coarse particles.

A combination recommended by Martindale is as follows:

℞.—Acid salicylic	- - -	3.0
Talci	- - - - -	87.0
Pulv. amyli	- - - -	10.0

Another, recommended by Jamieson:

℞.—Cerasini	- - - -	1.0
Kaolin	- - - -	2.5
Pulv. acid borac'c	- -	1.0
Zinci oxidi	- - - -	.5

Lotions are also used in acute eczema. They are protectives, sedatives, and astringents, and of stimulating character. To the former belong the simple lead lotion, the black wash, lead and opium wash, etc. The following is a sedative and protective lotion of general utility:

℞.—Calamine	- - -	℥j.
Zinci ox.	- - -	℥ii.
Glycerini	- - -	℥ij.
Aq. ad.	- - -	℥vi.

Apply with a large soft brush.

Ointments are not to be recommended in the acute stage of an eczema, but are of great service after the irritable condition has passed off, or in the subacute forms. Of these the old ung zinci ox., either alone or with vaseline, still holds its place.

When a cooling effect is desired, an ointment made up with cold cream or a similar substance as a base has an excellent effect. The following has been recommended by Dr. Jamieson as a substitute for cold cream:

℞.—Aq. rosæ ol. amygdala	-	aa℥x.
Cera alb. cetacei	- -	aa℥i.

An ointment made up as follows can be used on almost any form of eczema:

℞.—Zinci carbonate	- -	℥i.
Acid salicylic	- -	grs. x.
Vaseline	- - -	℥i.
Cerat galeni ad	- -	℥i.

It is especially useful in eczema of the face or lips.

Some ointments are applied in order to have a continuous effect. They prevent exposure to the air and act also as astringents and sedatives. The most useful of this class is the

drachylon ointment, which was so much used by Hebra. It should be made in the following way:

"The oil is to be mixed with a pint of water and heated by means of a steam bath to boiling, the finely-powdered litharge being sifted in and stirred continually; the boiling is to be kept up until the minute particles of litharge have entirely disappeared. During the cooking process a few ounces more of water are to be added from time to time, so that when completed water still remains in the vessel. The mixture is to be stirred until cool." The olive oil and litharge should be of the best quality.

Diachylon ointment, as used here, is usually made by melting together equal parts of olive oil and lead plaster. I have found that made according to Hebra's formula to be the best. It is first spread over strips of old cotton and applied over the diseased surface. It is probably one of the best and most generally used ointments, and can be applied in a large class of cases.

Similar continuous applications may be made by the salve muslins of Unna. That one containing zinc ichthyolate is especially useful. I have also used, particularly for eczema of the palms of the hands, the salve muslin containing salicylic acid.

In the chronic and indolent form of eczema, stimulating and alterative preparations are indicated. The mercurial ointments produce their beneficial effects largely on account of their character as parasiticides.

The tar preparations are specially useful in dry, scaly eczemas. The oil of Cade is most frequently used, and may be combined with the simple drachylon ointment. Ol. rusci is much more expensive, and is not any better than the oil of Cade. Salicylic acid is an excellent agent, particularly if there is much scaling and thickening of the skin.

As permanent dressings the pastes are very useful, particularly in the case of children, where it is almost impossible to prevent the ointment from being rubbed off.

Lassar's paste is the most generally used:

℞.—Acid salicylic	- -	grs. x.
Vaseline	- - -	℥ss.
Zinci oxid.	- - -	
Pulv. amyli	- -	aa℥ii.

This may be applied to any part of the body except the palms of the hands, the soles of the feet, and the eyelids. It acts as an astringent and protective.

The formula of Ihle's paste is as follows:

℞.—Resorcin	- -	grs. x.
Lanolin		
Vaseline		
Zinci oxidi		
Pulv. amyli	- -	aa ℥ii.

This, similarly to Lassar's, is first spread on fine old cotton and applied.

Some years ago a number of permanent dressings were introduced by Prof. Pick, of Prague. They have since been improved by Unna. The basis is a mixture of glycerine and gelatine in various proportions. They require to be heated in a water bath before application. They are in this way liquefied, and when they come in contact with the skin they form a thin elastic covering. They act as protectives, astringents, and sedatives. They need not be changed oftener than twice a week. Care should be taken not to use them where there is much exudation, as the latter collects under the dressing and produces irritation.

The following formula I have most frequently employed:

℞.—Gelatine	- -	15 parts
Zinci ox.	- -	10 "
Glycerini	- -	30 "
Aq.	- - -	40 "

This preparation is easily made by gradually heating together the ingredients in the proportions given above.

Another formula is given by Jamieson:

℞.—Gelatine	- -	15 parts
Zinci ox.	- -	10 "
Adipis	- -	10 "
Glycerini	- -	65 "

These are heated together over a water bath, and two per cent. of salicylic acid added. These preparations are especially useful when protection is needed. I have seen some of the most irritable itching forms of eczema wonderfully improved by these applications.

Another protective application is that made by dissolving rubber in chloroform. This was introduced by Auspitz, of Vienna, under the name of traumaticin. It was used, however, by Dr. Bethune, of this city, and by myself at his suggestion, some years before Auspitz's publication.

Many agents, such as zinci, oxide, etc., may be applied mixed with traumaticin in the same proportions as in the ordinary ointments. After its application to the skin the chloroform evaporates, leaving a thin covering of rubber, which adheres closely to the surface and is with difficulty removed. It is especially useful in eczema of the hands and feet.

Soaps are of great use in the old and indolent eczemas. The two most frequently used by me are the sapo viridis of Hebra, and the over-fatty soap of Unna. The latter is used in the more irritable conditions. Many indolent eczemas of the legs may be successfully treated by Hebra's method of using sapo viridis and drachylon ointment. The ointment is first spread on strips of cotton ready for use. The green soap is then applied to the parts, washed off with hot water, and the limb is thoroughly and quickly dried, when the ointment is applied and the leg bandaged.

In all the acute forms of eczema water must be excluded. In chronic eczema of the legs, accompanied by great thickening of the skin, the application of very hot water by means of a sponge has an excellent effect, and will aid in reducing the induration. In varicose eczemas the passive congestion is remedied by the application of the rubber bandage.

In conclusion, I will repeat my first statement. It is necessary to know, in the first place, the pathological process which is going on, and, in the second place, the nature of the agents you use, in order to successfully treat eczema by external applications. Each case must be carefully studied, and the effects of the application closely observed.

ACUTE PANCREATITIS, WITH HEMORRHAGE AND FAT NECROSIS.

BY JOHN CAVEN, B.A., M.D., L.R.C.P. LOND., AND WM. OLDRIGHT, M.A., M.D.

So little, comparatively speaking, is generally known, as yet, of the morbid conditions occurring in the pancreas that no excuse seems necessary when recording cases observed.

Amongst the recognized diseases of the pancreas, apart from neoplasms, hemorrhage and inflammation are perhaps the most important.

Hemorrhage into the pancreas is, on all hands, admitted to be the cause of death in a series of cases, in some of which the end of life comes suddenly, almost instantly, whilst in others the patient succumbs after an illness of at longest a few hours' duration. A satisfactory explanation of the occurrence of pancreatic hemorrhage, unaccompanied by inflammation, has not yet been brought forward. Vascular changes have been spoken of, but not proven; aneurysm, whilst naturally suggesting itself, has not been shown to exist. Fatty changes in the gland itself and a nervous origin have also been suggested.

Pancreatitis may be primary or secondary, the latter variety occurring in the course of pyæmia when it is suppurative, or as the result of a new growth, carcinoma most commonly, or calculus.

Instances of primary pancreatitis are so rare, or, at any rate, so infrequently recognized during life and proven by *post mortem* examination, that the number of them throws but little obstacle in the path of the student; on the other hand, the paucity of reliable and complete records renders accurate study and classification a matter of considerable difficulty.

The most exhaustive analysis of such cases that has yet been brought before the medical profession is to be found in the monograph on acute pancreatitis by Dr. Fitz, of Harvard University, being the Middleton-Goldsmith lecture for 1889.

Dr. Fitz, as a result of his investigations, not only of all recorded cases which he has been able to find, but of a relatively large number which he has been fortunate enough to have seen, classifies those showing inflammation under the heads: hemorrhagic pancreatitis, suppurative pancreatitis, and gangrenous pancreatitis. Any one of these forms may be accompanied by fat necrosis, in which disseminated nodules of necrosed fat, varying in size, are to be found scattered through the fatty deposits in the omentum, mesentery, subperitoneal tissue, and around and within the pancreas itself.

Acute pancreatitis is to be described anatomically as consisting in "degenerative changes in the parenchymatous cells, or exudation in the interstitial issue, or both these factors" (Fitz).

In all acute infectious diseases the parench-

ma of the pancreas, as of other glands, may be more or less affected by changes embraced under the name of cloudy swelling, which are supposed to be the initial stages of parenchymatous inflammation. In the class of cases under consideration at present, however, the changes are much more marked, and the interstitial processes are, no doubt, a large part of all instances of "genuine acute pancreatitis."

With regard to causation, acute pancreatitis is said to result in many cases from an "extension of a gastro-duodenal inflammation along the pancreatic duct." It may also depend upon hemorrhage, or be the cause of hemorrhage. In the following case the hemorrhage evidently accompanied or resulted from the inflammation, and did not cause it. No inflammatory process could be traced from the duodenum.

One of the most interesting, and at the same time difficult, problems in these cases is that of the causation of the accompanying fat necroses. Bacteria have been found in an around the necrotic patches by Chiari, and, as will be seen further on, the reporters of this case have also to speak of micro-organisms seen; but it is extremely doubtful whether these are more than accidental contaminations of the tissue. No proof can be offered of a causal relationship.

Balser concluded from examination of several cases of various diseases in which fat necroses existed along with other morbid conditions that an *excessive growth* of fat cells may cause death of fat and be associated with hemorrhage, either the necrosis or hemorrhage causing the death of the patient. Such an explanation can be of no effect in the case we are to report, since the amount of fat present was by no means excessive in any part of the body, and, moreover, Virchow thought that the changes spoken of by Balser as fat necroses were merely cadaveric, as proven by the absence of any vital reaction in their neighborhood.

Robert Langshans, of Berlin, in a contribution to the "Festschrift," dedicated to Virchow in honor of his seventieth birthday, describes a series of experiments made by him upon dogs and rabbits with the object of determining whether or not ferments derived from the pancreas itself could give rise to fat necroses. His procedure in conducting these experiments was quite simple, consisting in the injection into adipose tissue in the animals used of a watery solution of pancreas rubbed up in a mortar with fine glass. The results of twelve such experiments are tabulated, and in one only (a rabbit being the animal used) was any satisfactory conclusion reached. In this case fat necrosis, similar to that seen in cases of pancreatitis, was observed and fully described. Langshans has since undertaken a new series of experiments in the hope of confirming and concluding what has already been done; but meanwhile we are justified in considering his single successful result as at least very suggestive.

The following case is one of pancreatitis, with hemorrhage and fat necrosis:

Dr. Oldright was called to see Miss H. during the forenoon of Monday, October 5th, 1891, the message indicating that she was in severe pain, afterwards found to be referred to epigastrium. The intensity of the pain may be inferred from the fact that two messages were sent within fifteen minutes. On questioning it was found that the patient, in addition to an ordinary breakfast, had eaten a number of grapes, swallowing the skins. A diagnosis of acute dyspepsia was made and treatment to suit ordered, a small dose of morphine being given with other remedies. Within an hour and a half the physician was summoned again, the epigastric pain having become very intense, and being described now as passing through the back and up under the shoulder blades; vomiting had occurred, a quantity of grape skins constituting part of the vomited matter. A hypodermic of morphia was given to relieve urgent symptoms, and purgatives prescribed in order to clear the alimentary canal; at this time also a purgative enema was administered, with little result. During the next twenty-four hours opiates and carminatives were exhibited, and counter-irritants and fomentations applied externally. On Tuesday afternoon the patient appeared much better, and so far no rise of either pulse or temperature had been observed, but towards the evening the temperature rose to 101° F., and the radial pulse beat 100 to the minute; continued pressure over the lower part of the abdomen disclosed tenderness; treatment, opium in large doses and hot fomenta-

tions. On Wednesday morning the pain had subsided to a great extent, but nausea was marked. Opiates were now omitted and purgatives again administered—calomel, Seidlitz powder, and enemata. Bowels were moved thrice between 12 o'clock a.m. and 3 o'clock p.m., many grape seeds and skins passing. Shortly before 3 p.m. the physician was sent for, the report being that the patient had lost the use of her limbs. This motor paralysis was found to be complete in the arms and partial in the legs. Sensation also was impaired, more noticeably in the right arm than elsewhere. Hysteria from exhaustion was suspected, and a consultation asked for. About 8 o'clock p.m. Dr. J. E. Graham saw the patient with Dr. Oldright. The condition then was about the same as before: pupils, normal; pulse, 50 beats to the minute; muscles of neck paralyzed; sphincters, all right; patellar reflex was not obtained, but the test could not be made satisfactorily; no reflex gagging occurred on tickling the fauces; no paralysis of muscles of face or tongue; voice like that of a person with swollen tonsils; no albuminuria. The patient was then moved into a larger room, and was immediately seized with a severe epileptiform attack, which threatened suffocation, there being much spasm of the facial muscles. This convulsion was limited to the face and neck. Soon afterwards she seemed more comfortable. Pot. brom. and assafœtida were given by the mouth and rectum. At the request of her friends, Dr. A. J. Johnson was now called in consultation, meeting Drs. Graham and Oldright about 11 o'clock p.m. Dr. Graham and Johnson left about midnight. Shortly afterwards Dr. Oldright left the sickroom, going downstairs; he had been seated but a few minutes when the nurse came down to ask a question, received her answer, went upstairs and immediately called the doctor, who, on reaching the bedroom, found the patient dead. A friend in the room said she had been seized with a convulsive attack similar to the one described above and died in it.

The family history in this case is good in all respects, and throws no light upon it.

Post mortem examination of the body was made next morning about twelve hours after death.

Report: Inspection shows the body of a female of apparently about thirty years of age; nutrition very good; *rigor mortis* well marked; *post mortem* staining well marked in usual positions; external orifices all right.

Section: Shows a large amount of subcutaneous and subperitoneal fat; muscle in good condition; omentum presents numerous yellowish white nodules, varying in size from that of an ordinary bean downwards, in which, on cutting them open, whitish spots like caseous matter are found—these were at first supposed to be tubercles; mesenteric glands are enlarged and some show central opaque whitish areas as from necrosis; all the abdominal viscera exhibit marked venous congestion, but, with the exception of the pancreas, appear otherwise healthy; the thoracic viscera are in very good condition; heart contains fluid blood and no clots.

Pancreas: Much larger than usual in cross measurement and also thickened; the capsule is tense and distended over the parenchyma by a reddish fluid, and here and there upon the surface yellowish spots similar to those in the omentum are to be seen; similar spots are noticed in the peripancreatic tissue. On cutting into the organ a quantity of blood at once oozes from its surface, the whole tissue seeming to be soaked with it. Closer inspection shows that the blood is diffused through the interstitial tissue and underneath the capsule, but does not apparently invade the parenchyma. At no point is a clot visible. No ruptured vessels can be found, nor are there macroscopic changes noticeable in the vessels anywhere in the body. The brain and spinal cord also were carefully examined, and appeared to be in a perfectly sound condition.

Microscopic Examination: Parts of the pancreas, mesenteric glands, and omental nodules were submitted to microscopic examination, with the following results:

(*a*) *Pancreas:* The interstitial structures show considerable infiltration with blood, the capsule, subcapsular tissue, and interlobular bands near the surface being by far most affected. No changes can be made out in the vessel walls, but they are crammed with blood corpuscles; the stripping off of the endothelium of the arteries is very remarkable, the cells being mixed through the clotted blood in the vessels. The

capsule is also in places considerably infiltrated with inflammatory cells. In the fat tissue in the neighborhood of the capsule and adherent to it are necrosed patches similar to those described below, and even the fat which is not otherwise affected shows marked small cell infiltration. In the interlobular tissue, acute inflammation is in process, as indicated by round cell infiltration, but this is patchy. The parenchyma of the organ in parts presents areas of cell necrosis without definite signs of inflammation; in others merely cloudy swelling; whilst in others round cell infiltration is so dense as to completely destroy lobular structure. At no place can abnormal collections of fat be seen in the pancreas. The condition, then, is one of acute interstitial and parenchymatous pancreatitis, with hemorrhage and necrosis. No blood appears *within* the lobules.

(*b*) *Mesenteric glands:* Swollen; dense small cell infiltration of periphery, with central, necrosis, the necrotic areas being quite soft in the gross specimen.

(*c*) *Omental nodules:* These are seen on examination to consist of greatly modified fat tissue. A division into two zones, and in some cases three, can readily be made out. In the central and middle zones the cells retain their outline fairly well, and can generally be accurately delimited with the eye; in the outermost zone, in parts, only granular débris infiltrated with inflammatory corpuscles can be recognized. In many of the fat cells of both inner zones the cell contents are collected into a large globule located centrally in the cell, with either clear areas or granular matter surrounding; in many instances these globules are of a marked bright yellow color. The cells of the central area, as a whole, stain with carmine much more feebly than those of the middle zone, although both stain markedly enough. Taken from centre to circumference the cell contents can be better described as finely granular than otherwise, some being completely filled out, others only partially so. Fat crystals are to be seen in a few of the mid-zone cells, but not generally. The zone of the inflammatory reaction is narrow, as compared with the size of the whole nodule, and composed in large part of granular débris, leucocytes, and proliferated, connective tissue cells. In a few spots fat cells have broken down and collections of free oil globules are visible. This has happened near the outer zone. Staining for the bacillus tuberculosis gives a negative result, but treatment of sections, with methyl blue only shows numerous small rods, occurring singly or in pairs, scattered through the inflammatory zone, but very few being seen in the central areas. These rods vary considerably in length (4 to 10 *m.*), free individuals being longer than the articles of a pair. In single rods the ends are rounded. Spore formation is noticed in the longer rods. No micro-organisms have been seen in the pancreatic sections. Attempts at cultivation have failed.

Selections.

THE REACTION OF URINE WITH ETHER.

BY ANDREW H. SMITH, M.D.,

Professor of Clinical Medicine at the New York Post-Graduate Medical School; Physician to the Presbyterian Hospital.

If a specimen of urine, taken promiscuously, be thoroughly agitated in a test-tube with half its bulk of pure sulphuric ether, there will result, in most instances, an abundant white foam. If now the tube be corked and set aside, this foam rises to the surface and gradually condenses into a greyish gelatinous plug, so firm, it may be, that the tube can be turned upside down without disturbing its contents. In another smaller proportion of cases no foam will result from the agitation, and the ether will immediately separate from the urine and form a clear layer above it. In some instances a second prolonged agitation after the elapse of a few moments will produce the reaction described. In other cases it may be obtained by adding a few drops of acetic acid and shaking the tube again very thoroughly. It will always be noticed that when the reaction occurs the fluid begins to clear first at the bottom, and the clearing progresses upward. When the reaction does not take place the order is reversed, a clear layer of ether appearing first at the top. Pending a thorough chemical investigation as to the nature of the substance thus separated from the urine, I find that the reaction occurs in urine which does not respond to any of the

tests for albumen or for peptones. It occurs also in urine from which the phosphates have been removed, and it cannot be obtained with simple solutions of urea or of the urates. It is most abundant in the urine of those who have a good appetite and good digestion, and is usually absent after long fasting, or when the diet is greatly restricted. From these facts it seems probable that it represents an excess of nutritive material taken into the blood and thrown off by the kidneys, and not a product of disassimilation. Albuminous urine responds to the test in the same way and under the same conditions as normal urine; but if the patient is on restricted diet and the urine does not react to the test, it can be made to do so by adding nitric acid and filtering out the resulting precipitate. A portion of the albumen is redissolved by the acid, and at the time so modified that it is acted upon by the ether. This is shown by the fact that if the albumen be removed by heat and filtration before the acid is added, the reaction cannot be produced; but if a drop or two of acid be placed upon the filter, the filtrate immediately responds to the test. The same effect may be produced by acid spontaneously generated in the urine, so that a specimen of albuminous urine which will not show the reaction while fresh may do so after the acid fermentation has progressed for twenty-four or forty-eight hours.

It is possible that the presence of this material in the urine, and its peculiar reaction with ether, may explain some cases of anuria after prolonged etherisation. The ether being eliminated by the kidneys and mixing intimately with the urine in the tubules affords all the necessary conditions for plugging the latter with gelatinous material, too firm to be displaced, suspension of function necessarily following. Until we know more of the possible reactions of this substance, it will be well to receive with caution the results of some of the more "delicate" tests supposed to detect the presence of minute proportions of albumen.—*Lancet.*

THE MORALITY OF VIVISECTION. — The article on "Vivisection," by the Rev. L. J. Wallace, published in the March issue of the *Westminster Review*, is a significant indication of what the verdict of any dispassionate and rightly-informed layman must ultimately become. The question, Is vivisection useful? is one that hardly needs discussion in the *British Medical Journal.* The antivivisectors themselves have for the most part ceased to seriously rely upon ignorant denials of the utility of physiological experiment to medical knowledge, and therefore to remedial power. Consciously or unconsciously, the knowledge acquired by the more thoughtful antivivisectors in the course of controversy has led them to give more prominence to the broader issue summed up in a negative answer to the question, Is it moral?

Mr. Wallace, after discussing the utilitarian aspect, approaches the broad ethical issue in a dispassionate and judicial spirit. Reviewing the evidence on both sides, he recognizes that the antivivisection propaganda has been the outcome of emotions, misled by "descriptions" of a very partial and very exaggerated character, and he warns those who so recklessly impute evil that it may be immoral for the man of science to *abstain* from vivisection.

"A great moral force is working on behalf of the physiologists. Suffering and death are on every side of them, and, if by any fair means they can alleviate one and retard the other, they have no right to neglect these means. They are, so far as their power extends, debtors to humanity, and they would act an immoral part if they declined to make any legitimate effort to discharge this debt." This is the language of a man who, in presence of an ethical problem which has forced itself upon his conscience, has felt it his first duty to acquaint himself with the conditions and circumstances of that problem.

We most heartily welcome examination of this character; the bare details of vivisection are repugnant to every healthy mind; they are repugnant to the mind of the physiologist himself if he imagines them as dissociated from their motive. Vivisection is employed thoughtfully, reluctantly, and sparingly, but it is employed of imperious necessity. We wish that those impulsive antivivisectionists whose feelings have been outraged by the horrible imaginings to which they have given themselves up could have seen it to be their duty to search the springs of their own convictions, and to

admit as possible that the convictions of physiologists might be entitled to their respect. Upon no other condition than that of mutual respect can that corrective modification of mind by mind be secured which is essential to moral development. The motive of science and the instinct of mercy may and should exist in the same mind; the domination of one mind by one tendency, with a contempt or a hatred of another mind, is hurtful to both. We believe that at present the moral defect is greater on the side of the mercy-mongers than on that of the secret-searchers. But we also believe that the best men of both tendencies feel that mutual respect which is the condition of mental and moral commerce. It would hardly be possible to-day for any man to avow a total disregard for the sufferings of the animals he experimented upon; nor could an educated thinker write to-day, as was written from the Athenæum Club by Mr. Lilly, that "the results obtained by researches in the latrine and brothel are of precisely the same value as those which the vivisector derives from the torture trough." We would advise the conscientious antivivisectionist to read Mr. Wallace's article. It may lead him to distrust the leadings of "moralists" of the type of Mr. Lilly, who writes on two successive pages (one of them headed with the attractive title, "Artists in Filth and in Torture"): "I regard it (that is, vivisection) as absolutely unethical, and should condemn it unhesitatingly, however great the advantage resulting from it might be." . . . "I should be glad to see legislative sanction given to the proposal that vivisectors should make experiments on themselves and on one another."—*British Medical Journal.*

OPERATION FOR SPASMODIC TORTICOLLIS.—Some advance appears to have been made in the surgical treatment of this most distressing affection; but until its pathology is more clearly ascertained, we cannot hope that the results of treatment will be anything like uniformly successful. One point that lies on the surface is the variations met with in different cases. In one patient the sterno-mastoid muscle may be the only one affected, in another it will not be implicated at all, and similar variations are met with in the case of the other muscles which rotate the head. It is, therefore, difficult in some cases to determine exactly what muscles are implicated and to what nerves treatment must be directed. Difficulty also arises from the depth at which some of the muscles and the nerves supplying them are placed, so that any operation on these nerves involves a very deep dissection. Nerve-stretching, even when very thoroughly carried out, has not been attended with success, and simple division of the nerves has not given better results. Surgeons are now dealing with these cases by the free excision of the nerves supplying the affected muscles, removing the nerves as near to their central ends as possible. Last year M. Petit recorded twenty-six cases in which he had excised the spinal accessory nerve. Of these, in thirteen a successful result was obtained, seven were much improved, two were slightly better, and three enjoyed temporary benefit only, while one patient died from phlegmonous erysipelas. The operation in question is a comparatively simple measure. The more difficult cases are those in which the posterior muscles are involved. Early last year Dr. W. W. Keen recorded a case in which he had excised muscular branches of the posterior divisions of the first, second, and third cervical nerves with marked benefit, but not complete success. Soon after, Mr. Noble Smith recorded a case in which he had performed the same operation on the second, third, and fourth cervical nerves. Dr. Powers has now related a third instance of this operation, in which he exactly followed Dr. Keen's procedure. The last two patients were greatly benefited by the operation. Dr. Keen makes a transverse incision carried down through the complexus. Mr. Smith employed a vertical incision. The results thus obtained are well worthy the attention of surgeons, although the treatment is only empirical.—*Lancet.*

TOBACCO AND DEPOPULATION.—Thoughtful Frenchmen, it is well known, are coming to regard with some uneasiness the signs of stagnation, if not of actual decrease, in the population of their country. Malthusian doctrines, however attractive in point of economy, do not now appear to exercise that fascination which once was theirs, and which we cannot doubt has much to do with the reduction of reproductive

energy. We are reminded, however, by the author of a paper on this subject recently published, that other causes may have contributed somewhat to the same result. Under the heading of "Le Tabac et la Depopulation de la France" M. E. Decroix, who is the founder of a society intended to check the abuse of tobacco, assures us that, among such, a prominent place must be assigned to the influence of tobacco. The arguments by which he seeks to fortify this opinion are by no means void of ingenuity, and are supported by the evidence of investigations and information contributed by various medical men, and of the vital statistics afforded by different departments of the country. Among the former there seems to be a consensus of opinion that tobacco consumed in excess exhibits in various degrees a constant sedative influence upon the reproductive system. A series of experiments by Dr. Depierras are quoted in order to show that the same rule holds good among the lower animals. In this case the offspring of cock and male rabbits exposed to the fumes of tobacco are said to have proved feebler and shorter-lived than those born under natural conditions. The conclusions founded upon statistical testimony are very emphatic, more so, indeed, than we should consider to be justified by the accuracy of the method pursued in this enquiry. After comparing ten departments in which a greater, with ten others in which a less, amount of tobacco is consumed, M. Decroix, by summing up their collective disparities, has no difficulty in showing that in the former there is a marked excess of deaths, of stillbirths, of divorces, of illegitimacy, which he takes to be a mark of morbid vitality, and a falling off in the size of families. When, however, we compare the departments with each other separately, we frequently miss that evident connection between cause and effect which the author's views on tobacco would lead us to expect, and it is clear that we must in many cases allow for the action of other influences in producing the result for which it is blamed. Under the circumstances we cannot agree with all the propositions advanced in this paper. At the same time it cannot be denied that the excessive use of "the fragrant weed" is to be numbered among the forces opposed to a continuance of healthy life.—*Lancet.*

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PUBLIC HEALTH ACT AND INFECTIOUS DISEASES.

We think it very important that reports of contagious diseases should be sent to the proper authorities, in accordance with section 80 of the Public Health Act. Although the proper observance of this regulation involves a certain amount of labor on the part of the physician, for which he receives no remuneration, we believe the profession of Toronto, as a whole, have shown a commendable desire to conform with the requirements respecting such reports.

Section 86 of the Act provides that any one neglecting his duties in such matters shall become liable to a penalty of $20. Many have objected to such a provision; but we believe that past experience has shown that, without the penal clause, the Act would be to a large extent useless.

While, however, we are willing to support the observance of the laws, we must appreciate the fact that it is no trifling matter to have a respectable and reputable physician dragged into the police court, as Dr. Baines was, and subjected to the humiliation of the imposition of a fine for the violation of a law. The court, showing more sense than the accuser, recognized the fact that the doctor had shown no desire to evade the law, had actually reported the case, had been in the habit of reporting his cases, but in this instance had not done so within 24 hours after a diagnosis had been made, and imposed only a nominal fine. As we understand it, the case was one of naso-pharyngeal diphtheria in a young man, æt. 24, which terminated fatally in three days. Every pre-

caution was taken in the way of disinfection and isolation. Two trained nurses were obtained. Doctor Baines spent a large portion of his time, day and night, endeavoring both to save his patient's life, and to prevent the spread of the disease. The tremendous worry and anxiety to which he was subjected can well be understood and appreciated by all medical practitioners; and we think that the additional burden of his police court humiliation was, under the circumstances, quite uncalled for. Dr. Baines' friends were extremely pleased to learn that he was able to pay his fine—of one dollar—and thereby escape imprisonment; while the Medical Health officer has the proud satisfaction of knowing that he "won his suit."

THE WINNIPEG GENERAL HOSPITAL AND DR. FERGUSON.

We regret to learn from the *Northern Lancet and Pharmacist*, that Dr. A. H. Ferguson has been dismissed from the staff of the Winnipeg General Hospital by the authorities of that institution. The *Lancet* says that this action was "without shadow of cause or justification," and goes on to comment as follows: "Had Dr. Ferguson committed a grave crime, scanter courtesy could not have been extended to him. No intimation of his dismissal had, or has been given to him even up to the present, his first apprisal of it being a paragraph in the *Free Press* newspaper giving the names of the professional staff appointed for the ensuing year, Dr. Gray's name being substituted for his. . . .

"The students regard Dr. Ferguson as their teacher in surgery, and have entered a public and indignantly worded protest at this action of the hospital authorities, which they have sent to the public papers. They have very fairly pointed out that the fees they pay to the hospital for the instruction they receive within its walls form a considerable item of revenue, and that the dismissal of Dr. Ferguson deprives them of the instruction for which their fees were paid, and that perseverance in the course the governors have adopted will necessitate their going elsewhere for their surgical education."

Dr. Ferguson's career is well known to many in Toronto. He took his degree in Trinity Medical College, and graduated in the Universities of Toronto and Trinity College in 1881. He has been practising several years in Winnipeg, and has been highly successful. He was one of the promoters and strong workers in the Manitoba Medical College, in which he was Registrar and Professor of Surgery. We know nothing about the merits of the trouble between Dr. Ferguson and the hospital authorities beyond what we have learned from the editorial of the *Lancet*, from which we have taken a few extracts; but we feel very sorry that an act which must affect seriously the relationship existing between the medical college and the hospital should have been considered necessary by the governors of the latter institution.

THE MEDICAL ALUMNI ASSOCIATION OF THE UNIVERSITY OF TORONTO.

The annual meeting of this Association will be held in the Convocation Hall of the University on the afternoon of May 6th, immediately after the special convocation of the Medical Faculty. At a meeting of the Council held April 19th, it was decided to have a dinner on the same evening at Mr. Harry Webb's restaurant. A strong committee was appointed to make arrangements, and we understand that they are working with great enthusiasm, being determined to make it the most successful dinner in the history of the Association up to the present time. If they make it equal to the pleasant entertainment of last year, it will be quite satisfactory to all parties. There will be no official invited guests, but members will be allowed to bring friends on payment of one dollar and fifty cents for each. The charge for members will be two dollars each. This will include the annual fee for membership.

We have been requested to state that as some matters of considerable importance will be brought before the Association at the annual meeting, it is very desirable that there be a large attendance. The President and members of the Council would like especially to see the cities and towns outside of Toronto well represented.

CREDÈ, the distinguished obstetrician, died at Leipzig, March 14th.

ONTARIO MEDICAL ASSOCIATION.

The twelfth annual meeting of the Association will be held in Toronto on the 1st and 2nd of June. The topics for discussion will include "Diphtheria," "Antiseptics in Surgery," "Hay Fever," "The Third Stage of Labor," and "The Therapeutics of Constipation." Addresses are expected from some prominent American physicians.

A feature of this meeting will be two symposias of four papers each upon "Hip-Joint Disease—its early diagnosis; expectant, operative, and mechanical treatment"; "The Pneumonia of Children—differential diagnosis: from tuberculosis; from pleural effusion; general prognosis."

Papers of interest have been promised by various members.

The names of readers and subjects of papers should be sent to the Secretary by the 10th of May. Forms of application for membership may be obtained from the Secretary. Return tickets will be issued at one fare and one-third.

Meeting of Medical Societies.

CLINICAL SOCIETY OF MARYLAND.

WM. T. WATSON, M.D., *Secretary.*

Baltimore, Feb. 19th, 1892. The 262nd regular meeting of the society was called to order by President Robert W. Johnson.

Dr. Hiram Woods read a paper on

THE TREATMENT OF GRANULAR CONJUNCTIVITIS,

and exhibited patients treated by the method he now uses, viz., that of Dr. Knapp, which is the squeezing out of the spawn-like lymph follicles by means of forceps specially adapted to the purpose.

Case 1.—A man with pannus of three months' duration. Had been treated all this time with bluestone, with no improvement. Forceps were used very gently; some granulations pressed out. Considerable pain and much bleeding from conjunctiva ensued. Following day the man's eyes were wide open and photophobia completely relieved. Squeezed out some more granulations. He came back next day with conjunctiva quite clear. Has not returned since.

Case 2.—Girl with so-called diffused trachoma of two years' duration. Was treated all last summer with bluestone. In November was suffering intensely; the entire upper lid of right eye covered with spawn-like soft follicular granulations extending over on to the ocular conjunctiva. Two operations performed. At the first nearly all the granulations of the palpebral conjunctiva were squeezed out; at the second all those that had escaped in the first operation were destroyed. There was swelling and pain for a couple of days; these symptoms disappeared and photophobia also. There are still a few granulations in the retrotarsal fold, which will be removed. The palpebral surface is quite smooth.

Case 3.—Follicular trachoma of long duration. Granulations of connective tissue variety buried deep in conjunctiva. Dense, heavy pannus along upper part of cornea, and whole cornea vascular. Follicles pressed out with exercise of considerable force. Conjunctiva became perfectly smooth. After a month inflammation was set up by small amount of jequirity, with the view of clearing up the pannus. The pannus cleared up, the photophobia has entirely disappeared, and the eye is almost well.

Case 4.—Man troubled with trachoma for four years. Came to hospital early in January and was operated on without previous treatment. Granulations were of connective tissue kind. A great deal of thick, heavy pannus. Photophopia considerable, lachrymation much, and whole eye congested. Granulations squeezed out by using considerable force. There was a good deal of pain and considerable reaction, and after two weeks the eye was watery and somewhat painful. There is now no watering, the eye is clearing up, the lid is smooth, and he is in a fair way to get well of his pannus.

Two other cases, both in young Jewish women, were in the atrophic stage, and very little could be done except to relieve irritative symptoms. Both suffered intensely from photophobia and lachrymation. One operated on a week ago, and is almost entirely relieved of photophobia. The other, operated on yesterday, feels better to-day than before the operation. Two cases operated on at the hospital never returned.

His experience with these cases, together with the experience of Dr. Knapp in his 114 published cases, leads Dr. Woods to the conclusion that this is the best method ever devised for the relief of granular conjunctivitis.

Dr. J. E. Michael: I was for a number of years Dr. Chisholm's first assistant in the Presbyterian Eye and Ear Hospital, and I remember very vividly the many cases of trachoma that came to us day after day and month after month and year after year to have nitrate of silver or bluestone applied, and it was our habit to regard these cases as almost hopeless. I have noticed, of course, a gradual improvement in some of them, which would go to a certain point and then stop. I have never seen any cases which have shown anything like the improvement seen in these cases exhibited by Dr. Woods. I want to express my satisfaction that so important an advance has been made in treating such an obstinate and troublesome pathological condition.

Dr. Wilmer Brinton read a paper on

PHLEGMASIA ALBA DOLENS, WITH REPORTS OF THREE CASES.

In about 1100 cases of obstetrics Dr. Brinton has seen three cases of phlegmasia alba dolens, or the so-called "milk-leg." The various views as to its causation were given. It is now generally held that it is caused by phlebitis, that phlebitis being an extension of the disease from the vessels

of the uterus. Virchow claims it to be due to a physiological thrombosis.

Case 1.—Mrs. D. Confined in November, 1884. Second child. Labor rapid. Lying-in period uneventful until eleventh day. Temperature and pulse normal for 7 days; the record no longer kept. On eleventh day patient was found in bed crying with pain in left leg. Pulse, 120; temperature, 101½. Had had a chill in the morning, followed by feeling of *malaise* and intense pain in left leg. Leg was swollen and hot to the touch. Swelling much greater next day. Pulse and temperature became normal in a few days. Swelling gradually disappeared, first from the foot, then from the calf, and then from the fleshy part of leg. It was three months before she ceased to complain of stiffness and soreness.

Case 2.—Mrs. S., confined by a midwife, Oct. 8th, 1888. No trouble or complications. Remained in bed till tenth day, and then resumed her domestic duties. On the night of fourteenth day after confinement had a chill, followed by pain through body and intense headache. Next morning was somewhat better, but could not move left leg without pain and it was rapidly swelling. Dr. Brinton was called in next day and found patient in bed. Pulse, 120; temperature, 101½. Complained of a general feeling of *malaise*, severe headache, and very severe pains in left leg. Leg much swollen and œdematous, especially in calf and about the ankle; especially tender to touch on inner side of popliteal space. In two days swelling about ankle began to disappear. In 17 days got out of bed, and soon began to move about and attend to household duties.

Case 3.—Mrs. T., delivered Sept. 1st, 1891, of twins. It was a case of placenta prævia centralis, with much loss of blood, from which the patient rapidly recovered. Lying-in period uneventful, although pulse and temperature slightly above normal. Pulse 85 to 100, and temperature 99½ to 101. On the 10th day sat up for a short time. On the evening of the 11th day temperature rose to 104 and pulse to 126. Had had decided rigor about midday. Next morning, pulse 100; temperature 101. Examination revealed a case of septic endometritis, due, doubtless, to lacerated cervix. The "skilled" nurse had given the injections in such an imperfect manner that no benefit had been derived. On the 4th day from the beginning of the attack the left leg showed marked signs of phlebitis. Pain first felt below Poupart's ligament, and extending down the thigh to the leg. The leg became greatly swollen. In ten days painful symptoms subsided and patient moved the leg without much pain, when suddenly pulse became rapid, temperature 104, and right leg became involved more extensively than the left. About seven weeks from time of delivery she was able to be removed to Washington. She is now enjoying the best of health.

The treatment of these cases was by internal administration of quinine, opium, aconite, and phenacetine, and, locally, absolute rest of limb, application of flaxseed poultices to certain parts of limb for a few days, and later the limb was rubbed from time to time with camphorated oil and a flannel bandage applied daily from toes upward. In Case 3 the uterus was washed out daily for some time with bichloride solution.

Dr. W. S. Gardner: I would like to ask Dr. Brinton if he kept the temperature record of that first case up to the time she was attacked.

Dr. Brinton: I did not. It is now several years since, but I am satisfied that the pulse and temperature were practically normal; if not, I would have made a record of the case.

Dr. Gardner: There is quite a difference between a "practically" normal temperature and an actually normal temperature. I believe that if the temperature records of all these cases are kept accurately you will find that few, if any, will have a normal temperature from the time of confinement till the time that phlegmasia alba dolens comes on. I think it is a fact that is about as well established as anything connected with septic troubles of the puerperal state that this is one of the conditions that we have as the result of septic infection, that it is nothing more than a connective tissue inflammation in the leg due to sepsis. The clot in the veins is entirely a secondary affair and has nothing materially to do with the condition. There are many *post mortems* reported in which there were no clot and no phlebitis. Even if this were not the case, the retarding of the return flow of blood would not give the condition found in phlegmasia alba dolens. Retarding would give you a simple œdema. In phlegmasia you have, in addition to œdema, what seems to be more of an inflammatory condition, although it is not associated with the redness of ordinary inflammation; it is an infiltration into the tissues instead of a pouring out of serous fluid into spaces beneath the skin, so that the limb becomes practically solid and does not pit readily on pressure.

So far as the treatment of these cases is concerned, it is just the treatment of all our infectious diseases except syphilis and malarial fever. You cannot do anything with them; they either get well or they die. You cannot cure typhoid fever, nor scarlet fever, nor phlegmasia alba dolens, nor troubles where there are micro-organisms developing in the tissues. You can only treat the symptoms as they arise.

Dr. J. E. Michael: The question as to the necessarily septic nature of phlegmasia alba dolens is not by any means settled, and Dr. Gardner's statement that a careful record would in all cases show a rise of temperature or other conditions indicating a septic state of the patient is not carried out by the facts in many instances. I am convinced that Dr. Brinton's cases are as he stated them to be. He took the temperature for a certain number of days, and, finding no rise, did not take it again. I have seen one case of phlegmasia. The woman was dropsical, badly nourished, and badly cared for. She had general œdema and œdema of the lungs, and every evidence of advanced kidney disease. She was confined successfully. For several days her temperature was normal, that is, under 100; for we regard, in such cases, anything under 100 as normal. On the 12th day there was the sudden occurrence of pain and the other symptoms which Dr. Brinton has given as indicative of beginning phlegmasia alba dolens, and the case turned out to be so and had a fatal issue. The uterus, vagina, and everything connected with the generative organs were absolutely free from any evidence of previously existing inflammation. There was a clot in the femoral

iliac vein which had undergone softening, and was described by the pathologist as the "puriform softening of Virchow." I think there is a question if there was anything which comes under the description of puerperal septicæmia and its various manifestations. What adds to the interest of this discussion is the statement made by Dr. Brinton, which is in accordance with our histories and experience, that cases of phlegmasia alba dolens occur, as a rule, in patients having a normal puerperium. The condition of the blood or whatever it may be which predisposes it to easy clotting is undoubtedly, according to the views of Virchow, responsible for its clotting under these circumstances. I am convinced that at least a portion of these cases are not associated with distinct phlebitis, but are the result of primary clot formation, and do not begin till the clot is formed.

The other side of the case, and one that is taken by a good many, including Dr. Gardner, is that phlegmasia alba dolens always indicates a septic condition. I am inclined to think that there is a septic condition which produces, clinically speaking, the same condition which we find in phlegmasia alba dolens. We have the occurrence of phlebitis in the neighborhood of the generative tract and in the adnexa, and we may have a phlebitis which would involve the femoral vein and would produce the clot and the general train of symptoms following. I do not think we have grounds for sepsis in all the cases. I believe the only satisfactory solution can be arrived at by gathering together all possible information about the occurrence of this disease in lying-in hospitals now and comparing it with its occurrence in years gone by, when septic conditions prevailed to such an extent. Virchow says that in the examination of these clots in cases that terminate fatally we have an appearance of pus surroundlng the vessel and which would on careless examination be taken for pus, but in which the most scrutinizing examination reveals no pus and no bacteria; so I am inclined to think that we can have phlegmasia alba dolens with no septic infection whatever. I am inclined to think that two of the cases spoken of by Dr. Brinton were of this kind.

Another point bearing on this subject in a most practical way is that in by far the great majority of cases where we do have positive puerperal septicæmia, we do not have phlegmasia alba dolens.

Dr. J. H. Branham: As Dr. Michael has said, it is difficult to decide whether all cases of this disease have the same cause. Where there is a clot in the vein, if the trouble begins as an infection, the organisms enter some of the uterine vessels and gradually extend to the larger vessels; this is the theory maintained by many good observers. If it is simply clotting of blood extending from the smaller veins into the larger ones, this can occur without sepsis. Some cases are not accompanied by these clots at all; in these cases the swelling is due, I think, to stoppage of the lymph vessels.

The occurrence of chill and the rise of temperature and pulse in these cases look as though there was some form of septic infection. I do not believe that simple stoppage of circulation without some infection in addition causes these symptoms. As to how the infection gets there, there is some doubt. It is well known that we may have a very late form of sepsis in obstetrical cases. Without any previous rise of temperature, decided septic trouble may come on ten to eleven days after labor. Either there was a late infection or there was at first a very slight infection and then it took time for sufficient development of the organisms to produce decided septic symptoms.

Dr. W. S. Gardner: With reference to the history of these cases, we know that it is an extremely rare disease. Tyler Smith gives us a history of one man having three successive cases of labor in which phlegmasia alba dolens occurred. There was another series of three successive cases in this town a few years ago. While these series of cases are very short and might be considered as coincidences in any ordinary disease, considering the extreme rarity of phlegmasia alba dolens, I think a series of even three cases is strong presumptive evidence that it must be due to something which can be communicated by some one to the patients.

If the remarkable degree of disorganization which is found in these cases is not due to micro-organisms, how then are you going to account for it?

Dr. Brinton: I am inclined to think that sepsis is the cause in a certain number, but not in all cases.

As to normal temperature, in the vast majority of cases I think that the temperature will be 98° to 99°, and that in many cases there is a normal temperature of 100.5° In some cases where the temperature has been 100°, the lying-in period has been as uneventful as where the temperature was 98.5°.

March 4th, 1892. The 263rd regular meeting was called to order by the president, Dr. Robt. W. Johnson.

Dr. J. M. T. Finney read an exhaustive paper on

APPENDICITIS.

D. W. S. Thayer: A number of men in Munich have collected one thousand cases of appendicitis in the Munich hospitals. A German doctor has analyzed these cases, and arrives at the conclusion that appendicitis is fully as common in females as in males, if, indeed, it is not more common. As to age, he finds the proportion almost exactly the same in old age as in youth.

Operation must be governed by surroundings. In a large city where we have good surgical skill, I believe that where the symptoms progress twenty-four hours the case should be handed over to the surgeon. I believe that the majority of these cases belong to the surgeon.

Dr. J. D. Blake: There is no doubt but that under proper conditions an early operation is advisable. To induce the patient's family to permit the operation to be done at his home or at a hospital is often impossible.

I was rather struck with Dr. Finney's idea of combining all these conditions—typhlitis, perityphilitis, and appendicitis—under the same head, because it is a difficult thing to know just which you have.

I remember that Dr. Chew once said that at a meeting of the American Medical Association the physicians were discussing appendicitis on the medical side and concluded that at a very early day such cases should be handed over to the surgeon for operation; at the same time the surgica

section were discussing the same thing, and concluded that an operation should not be performed too early, that it was better to wait.

I have seen two cases where an early operation showed that the trouble was located in the appendix, which was removed. In two other cases that I have seen there was so much adhesion that it was difficult to determine where the trouble began.

I remember one case in a young man where the aspirator was used to determine the presence of pus. Three and one-half ounces of pus, with distinct odor, were drawn. It was thought better not to withdraw it all, as the walls of the abscess might collapse and there would be a tear in the abdominal cavity. The patient has since had no further trouble.

Eight months ago I was called to a young man with appendicitis. I advised operation, which was declined. Five days later I aspirated him and drew away nearly four ounces of pus. The next day I drew away a little over two ounces of pus. On the tenth day I removed about an ounce of very thick tenaceous pus. This patient has never had any trouble since. I had a similar case six months ago in which I aspirated twice. He has since complained of pain about that region, and I have recommended an operation. Certainly, where the diagnosis is not plain, an aspirator rarely jeopardizes the case, and very often throws some light upon the trouble. In another case, in which I used an aspirator, I got about three ounces of blood, and the symptoms all disappeared.

Dr. J. F. Martenet: I am distinctly a medical man, but have been converted through personal experience to the belief that appendicitis is distinctly a surgical trouble. The cases which I have attended have come on abruptly, with acute pain. I have had four cases in my practice within twelve months. Two of the cases Dr. Chambers saw with me. An operation was advised, but in neither of the cases would the family consent. My habit at present, in every case I meet with, is to state that it is a distinctly surgical trouble, and refer it to the surgeon. One of my cases who refused operation secured relief by suppuration through the bowel. This was a year ago. In July last she passed through another attack safely. Lately she was operated upon by Prof. Kelly and is now well.

Dr. J. W. Chambers: The statistics from the medical side seem to be faulty. A person may have had three or four attacks, and they are reported as three or four cases cured. A surgeon operates on a case, and reports one case cured.

As to women having it as frequently as men, I have under my own observation known of three women upon whom the gynecologists had diagnosed pelvic cellulitis and salpingitis, and removed the "tube," which proved to be the appendix. In a large number of cases the appendix is really a pelvic organ, and if inflamed it will certainly be a case of salpingitis with some gynecologists. Such errors may have something to do with statistics. There is no reason in the world why women should escape more than men; certainly they are just as liable to catarrhal affections.

Referring to aspiration, I think Dr. Blake's patients are relieved rather than cured. I should hesitate to use the needle. If I should find pus with the aspirator, I should never feel that I had done my duty unless I had cut down and removed all the pus. It would not be good treatment to aspirate an abscess of the thigh, and it is also not good treatment for an abscess in the iliac region.

Dr. Ingle: I believe the sooner we place these cases in the hands of the surgeon the better. When the family would not consent to an operation, I have treated these cases with salines and enemata, without any relief whatever.

Dr. Thayer: In the Munich statistics it was said that undoubtedly cases of appendicitis had been called salpingitis and pelvic cellulitis, and many cases in the female were doubtless missed in this way.

Dr. Martenet: Two of my cases occurred in females, one of five years and the other of ten years of age.

Dr. Blake: There are certain cases where I can find no distinct indication of what my patient has, whether it is typhlitis, perityphlitis, or appendicitis, and when I have waited long enough I put in an aspirator to find out if there is pus, and in no case have I seen bad symptoms follow, and in some there was distinct benefit. I think we are thoroughly justified in using an aspirator to make a diagnosis.

Dr. Finney: As these are pus cases, the operation can be done as well at the patient's home as in a hospital.

As to aspiration, I agree entirely with Dr. Chambers. Where there are sufficient indications for aspiration, there are still more indications for the use of the knife.

Clinical Notes.

A CASE OF NEURITIS.

G.F., janitor, Englishman, æt. 52, married.

Family history: Unimportant. Father and mother were of rural laborer class; both died about the age of sixty-four. No history of cause, except that the father had for some time before death suffered from shortness of breath (asthma?) and rheumatism, not apparently very severely.

Personal history: Enlisted at the age of eighteen years in the British army, artillery service, and served till the age of twenty-nine, when he got his discharge, the regiment being then in Toronto. He acted for the most of his period of service as officer's valet, and so escaped the ordinary hardships of service. His habits having always been temperate and careful, he left the service in sound health; no trace of venereal or syphilitic disease. Since leaving the army he has acted as janitor of a college in Toronto.

History of present attack: During November, 1891, he found his legs becoming weak and

painful from the knees down, especially on making any muscular effort, such as lifting, and finally even standing. This condition came on gradually, and led to his having to give up work.

On examination I found, in addition to slight general disturbance and *malaise*, largely mental in origin and owing mainly to family matters, the following conditions:

Digestive system: Normal.

Circulatory system: Normal.

Respiratory system: Normal.

Emunctories: Acting very well on the whole.

Nervous system: In addition to general *malaise* referred to above, the pain and tenderness complained of was found to be very definitely confined to the lines of the external and internal popliteal nerves. The least pressure on the median lateral lines of the leg elicited great pain, which was deep-seated. Pressure on the posterior line of the leg was not nearly so painful. The pain thus elicited lancinated up into the thigh and down to the toes. The point where the external popliteal nerve rounds the head of the fibula was excessively tender. The extent of the tender area was from the upper end of the popliteal space to the lower third of the leg. This condition was exactly symmetrical in both legs.

Accompanying the tenderness were other nervous disturbances, both motor and sensory.

(1) *Motor disturbances:* Tremulous spastic contractions of the muscles of the legs occurred every few moments, causing sharp pain; they occurred in spite of any effort of the patient's will to stop them. The knee jerk in both legs was decidedly exaggerated, particularly the left. The muscles were so "weak," responded so ill to volitional impulses, as to cause an incoordinate and tottering gait.

(2) *Sensory disturbances:* These were interesting. On each side of the leg, in the median line and occupying about the middle five or six inches of the length of the leg, was an area, three-fourths of an inch or so wide, of anæsthetic skin, pressure upon which elicited deep-seated pain; below this, above each malleolus, was an area, one and a half inches wide and two or three inches long, of hyperæsthetic skin, slightly tumefied, but not appreciably pitting on pressure, the slightest brushing of which with the finger-nail caused sharp pains in the nerve tracks in the back of the leg. During recovery the anæsthetic portions of the skin seemed to recover their normal condition first.

In a few days similar pain and tenderness appeared in the arms, the brachial nerves being involved for three or four inches along the inner border of the biceps. Motor and sensory disturbances did not occur in the arms, beyond an occasional irritable twitching.

Dr. J. E. Graham saw the patient with me and drew my attention to the defined anæsthetic and hyperæsthetic skin areas. His diagnosis was like mine—multiple neuritis—and he suggested the cause, which I believe to be the correct one, that the neuritis was rheumatic. Careful enquiry led me to exclude nicotine, alcoholic, and metallic poisoning as the cause. The patient himself ascribed it immediately, and I think correctly, to the fact that after spending the greater part of the day, and all the night, in a very warm, dry room over the boilers of the engine room, he had to walk half a mile or more to the post office night and morning. He noticed for some time that the cold "struck in," from the knees down, very sharply, then the legs ached all day, and, latterly, were sore all the time, except when he was out in the cold, which seemed to relieve them. The temperature of the room in which he slept, though he kept the window and fanlight open, was at least 75° F. all the time. During the day he was constantly on his feet and running up and down stairs.

Treatment—Medicinal: Regard had to the excretory system. Alkalies and potassium iodide administered. Locally, the pain was controlled very partially by poultices and glycerinum belladonnæ. Rest was enjoined in bed, and later on a sofa, though splints were not applied.

Dietetic: Nourishing food such as patient fancied.

Duration of attack: Five weeks elapsed before he could return to work.

Second attack: Began in a similar way about the middle of February, and ran a similar course, except that arms were unaffected. Nerves of legs involved no higher than knee. Marked by same symmetry of distribution as before. This time the left leg was rather the worse, and the sense of weakness from the

knees down more marked, with appreciable atrophy of peronei muscles, especially of left leg.

Treatment: Anti-rheumatic remedies and rest, followed on subsidence of active symptoms by a mixture containing strychnine, hydrochloric acid, and calumbo. At the end of March, 1892, after five weeks' absence, he returned to work, pain all gone, very little tenderness persisting, no sensory disturbances, but slight weakness still felt, the peronei of the left leg being still distinctly atrophied, and tremulousness of both hands, suggesting incipient *paralysis agitans.*

I shall keep this patient under observation and report further anything worthy of record. F.

Correspondence.

Editor of THE CANADIAN PRACTITIONER :

Your issue of March 16th contains some remarks by Dr. Seibert, of New York, intended, I presume, as a reply to an article of mine published Feb. 1st; but really I fail to see in what manner he has answered my questions, but one, viz., that the corpses of the bacilli slaughtered by chlorine are the guardians of the living tissue.

Now I do not presume to be so thoroughly versed in pathology as such men as Lœffler, Klebs, or even Dr bert, all of whom I acknowledge to be vastly my superiors in that respect, they having infinitely superior advantages and facilities for obtaining pathological knowledge than I could possibly attain in a comparatively small country town, and it is to this superiority I appeal for certain explanations asked for. Still, to my mind, my queries relative to the local origin of diphtheria remain unanswered, and, until some further proof of the correctness of local origin views appears, I shall hold fast my own ideas of constitutional origin. Dr. Seibert states that "true diphtheria is caused by the Lœffler bacillus (usually associated with streptococci) entering the mucous membrane of the pharynx, and there causing that local inflammation known as diphtheria." Now did I not say in my article that diphtheria was the result of a bacillus? Is that remark of Dr. Seibert's any answer to my first question: What produces the symptoms during the period of inoculation? (And I think all will acknowledge that there *is* a period of incubation.) This exists for some days previous to the local manifestation in the throat. If the bacilli merely produce a specific local inflammatory process, and this local inflammation produces the constitutional symptoms, how is it that the latter precede the former?

I perfectly agree with Dr. Seibert that the exudation is the *result* of the disease, but my contention is, this exudation is the mode by which the poison is eliminated from the blood, and is harmless if it can be kept aseptic, or unless it becomes so abundant as to interfere with respiration or deglutition. The crisis arrives and it is cast off. How is it that the (sometimes severe) constitutional symptoms which *precede* the appearance of the pseudo-membrane subside so visibly when the exudation takes place? Is it not because the blood, which has been so charged with the poison, has succeeded in obtaining a spot for elimination, the tonsils, this acting as a safety-valve, which prevents an explosion that might kill the patient in a very short space of time, so overwhelmed would he be by the accumulation of the poison?

Dr. Seibert's theory is that there is, first, an inflammation, and, secondly, an exudation, so that the disease actually existed before the exudation appears by which the disease is recognized. During, and prior to, this inflammatory pre-exudate stage certain symptoms manifest themselves, constituting the period of incubation. I want to know what produces these symptoms. Are they to be accounted for by a reflex action produced by local irritation and infection? Or is it by the action of a certain poison contained in the blood?

If the disease is of local origin, why does the bacillus select the mucous membrane covering the tonsils? Is it different in any way from that covering the palate and uvula? And why is it that in case of one tonsil being attacked, the other will take on the same form without involving the intervening soft palate and spread by direct extension?

Dr. Seibert has cleverly avoided replying to my questions by asking others relative to erysipelas, phlegmon, carbuncle, and abscess, in which I cannot observe the least resemblance or even comparison to the question at issue.

I can assure you I am not directing my remarks to Dr. Seibert personally; but, as I cannot possibly harmonize the local origin theory with the order in which the symptoms, during a case of diphtheria, occur, I should like some explanation as to the reason of this. After receiving a fair and common sense cause for this reverse order of things, I shall enrol my name as a convert, and not until then.

I hope you forgive me for occupying so much space, and trust that this may be the means of obtaining some further explanation and more satisfactory reply to my questions.

J. S. BENSON, M.R.C.S. Eng.

Chatham, N.B., March 28th, 1892.

Book Notices.

A Practical Manual of Diseases of the Skin. By G. H. Rohe, M.D., Prof. of Mat. Med., Therapeutics, and Hygiene, and formerly Prof. of Dermatology in the Coll. of Physicians and Surgeons, Baltimore, etc., etc., assisted by J. W. Lord, A.B., M.D., Lecturer on Dermatology and Bandaging in the Coll. of Physicians and Surgeons; Asst. Physician to the Skin Department in the Dispensary of Johns Hopkins Hospital. *No 13 in the Physicians and Students' Ready Reference Series.* 12mo., 303 pages. Extra cloth; price, $1.25, net. Philadelphia: The F. A. Davis Co., Publishers, 1231 Filbert Street.

Book Reviews.

Treatise on Gynecology, Medical and Surgical. By S. Pozzi, M.D., Professor Agrégé a la Faculté de Médicine; Chirurgien de l'Hopital Lourcine-Pascal, Paris; Honorary Fellow of the American Gynecological Society. Translated from the French edition under the supervision of and with additions by Brooks H. Wells, M.D., Lecturer on Gynecology of the New York Polyclinic; Fellow of the New York Obstetrical Society, and the New York Academy of Medicine. Vol. I., with 305 wood engravings and 6 full-page plates in color. New York: William Wood & Co., 1891.

Judging from the first of the two volumes, we are inclined to think that the translator has some reason for his statement that this treatise is the best work on gynecology which has appeared for many years in any language. The first chapter contains a very clear exposition of antisepsis in gynecology. We believe the author is correct in combining antiseptic with aseptic methods; and, especially in laparotomy, his statement that "rigid asepsis should be the rule for the interior of the abdomen, antisepsis being reserved for the exterior," is true. In his chapter on metritis he uses the valuable plates from the atlas of Prof. Wyder, of Zurich. We agree with him when he differs from what he considers the extreme views of Emmet, attributing so much to the effects of scar tissue in a torn cervix. He takes up the subject of infection in this chapter. We think it would be better placed with his antiseptic methods, or in a separate chapter. In places he follows the old, unproven, mysterious lines of the text-books of the past, modifying them, however, more than they have been modified in any text-book approaching completeness and giving evidence of a practical and not a theoretical grasp of the subject. He is evidently, what every modern gynecologist should be, an abdominal surgeon. Virginal metritis, found by some in every nulliparous woman with a backache, is left in the same foggy atmosphere that has always surrounded this supposed frequent but really rare disease. Is the author one of those who twice a week makes iodine or other applications to virgins with leucorrhœa and backache, or is he not? Is he a dilator of cervixes for menstrual pains and slight flexions, or is he not? If one or both, with what honest or lasting success?

In speaking of those historic relics, the intra-uterine stem pessaries, he says that they are most dangerous, but spoils the assertion by adding "unless carefully watched by the surgeon." We have no hesitation in saying that they should never be used.

We disagree with the author when he rejects diathesis as a predisposing cause of metritis. He holds that all metritis is infective. Granting that the statement may be correct, we believe that metritis occurs more frequently after labor or abortion in women of a tuberculous diathesis than in those who are free from such taint. The chapters on uterine fibroids are excellent.

We are glad to see that he gives our countryman, Trenholme, of Montreal, credit for having at least published, in 1876, the first known

case of castration for uterine myoma, although the general adoption of the operation was largely due to Hegar and his writings.

A list of Hegar's results will bear repetition here (castration for myoma):

(*a*) Hemorrhage. In 20 cases there was immediate cessation of the bleeding; in 4 cases cessation after irregular losses; in one case persistence of irregular metrorrhagia; in one case temporary menopause, then hemorrhage and fibro-cystic development of the tumor; in one case menopause, then hemorrhage, with beginning enucleation of the tumor.

(*b*) Tumor. In the same series of 28 cases, 22 diminution of tumor; 3 cases no change; 1 case, diminution doubtful; 1 case, appearance of a fibro-cystic tumor; 1 case, secondary enucleation.

He says the absolute reliance that can be placed in any report accompanied by the name of Hegar gives peculiar interest to these figures. He evidently mistrusts the statistics of some others.

We believe that before long the revived abdomino-vaginal hysterectomy will take its proper place, and that no text-book will be complete without a full description of it. We will then read less about these formidable pedicles, and operators will wonder why they kept to their pedicles at all.

A chapter is wisely given to that neglected subject, fibroid tumors complicating pregnancy. It is not as full as it might be, and leaves many important questions unanswered.

The subject of carcinoma uteri is handled in a masterly manner. In discussing the subject of uterine displacements he avoids the most important point in the discussion, namely, the results of hysteropexy, Alexander's operation, etc. The opinions of every author are much needed on this subject.

These operations, if honestly followed up, will be found, we fear, to give only a small measure of relief. The profession awaits such a critical review of the subject.

The elaboration deemed by some necessary in a text-book, and mentioned by the author in his preface as likely to be tedious, can be carried further on the groundwork now established with advantage to the work and profit to the reader. We hope this will be done in some future edition.

The anatomy of the sexual organs has been left out of the work. Many valuable plates have been added by Dr. Brooks H. Wells. The set of colored plates showing the different diseases of the cervix uteri from the catarrhal erosion of a nulliparous cervix to the papillary hyperplastic condition simulating epithelioma will be of great benefit to practitioners. The plates of the methods of suture are the best to be seen in any single work.

We heartily commend this volume to the profession, and feel assured that they cannot afford to be without it. The second volume will appear shortly.

We congratulate the author on the completion of his task. He has added a valuable volume to medical literature. The publishers are to be congratulated. They have made a wise selection from foreign medical literature.

The International Medical Annual and Practitioner's Index for 1892. Edited by P. W. Williams, M.D., Secretary of Staff, assisted by a corps of thirty-two collaborators—American and European—specialists in their several departments. 644 octavo pages. Illustrated. $2.75. E. B. Treat, Publisher, 5 Cooper Union, New York.

The tenth yearly issue of this valuable one-volume reference work is to hand, and it richly deserves and perpetuates the enviable reputation which its predecessors have made for selection of material, accuracy of statement, and great usefulness. The corps of department editors is representative in every respect. Part 1 comprises the new remedies, together with an extended review of the therapeutic progress of the year. Part 2, comprising the major portion of the book, is given to the consideration of new treatment, and is a retrospect of the year's work, with numerous original articles by eminent authorities. The third, and last part, is made up of miscellaneous articles, such as Recent Advances in Bacteriology, Medical Photography, Sanitary Science, Use of Suppositories in the Treatment of Disease, Improvements in Pharmacy, New Inventions in Instruments and Appliances, Books of the Year, etc. The arrangement of the work is alphabetical, and with its complete Index makes it a reference book of rare worth.

First Lines in Midwifery: A Guide to Attendance on Natural Labor for Medical Students and Midwives. By G. Ernest Herman, M.B., F.R.C.P., Obstetric Physician to the London Hospital, and Lecturer on Midwifery; Examiner in Midwifery to the Royal College of Surgeons. In one 12mo. volume of 198 pages, with 80 illustrations. Cloth, $1.25. *Students' Series of Manuals.* Philadelphia: Lea Bros. & Co., 1892.

We predict for this number of the "Students' Series of Manuals" a widespread popularity. The trained nurse, the student just commencing the study of midwifery, and even the experienced practitioner, will find in it much of value. A number of original plates, and some copied from Faraboeuf, serve to elucidate points which usually puzzle the student.

The Diseases of the Mouth in Children (non-surgical). By F. Forcheimer, M.D., Prof. of Physiology and Clinical Diseases of Children, Medical College of Ohio. Philadelphia: J. B. Lippincott Company.

A series of articles originally published in the *Archives of Pediatrics* forms the basis of this book. It is the first in the English language to bring together the facts in connection with diseases of the mouth in children. Diseases of the mouth are usually so tractable that one scarcely sees the necessity for a special treatise on the subject; but, if a special treatise be needed, this certainly meets all the requirements.

A Short Manual of Analytical Chemistry. By John Muter, M.A, Ph.D, Analyst to the Metropolitan Asylum Boards, etc. Edited by C. C. Hamilton, M.D. Philadelphia: P. Blakiston, Son & Co.

This American edition differs from the English only in changes rendered necessary by the United States Pharmacopœia. Written originally for students in pharmacy, it will be found suitable for medical students as well.

Pamphlets and Reprints.

Acute Retroversion of the Virgin Uterus: Report of Cases with Remarks upon the Difficulty in their Replacement. By William A. Edwards, M.D., San Diego, Cal., Fellow of the College of Physicians of Philadelphia, and of the American Pediatric and Pathological Societies, etc. Reprinted from *The Annals of Gynecology and Pediatrics.*

Contributions to the Normal and Pathological Histology of the Fallopian Tubes; also *Contributions to the Histogeneses of the Papillary Cystomata of the Ovary;* also *Pelvimetry for the General Practitioner;* also *The Premature Induction of Labor in Contracted Pelvis.* By J. Whitridge Williams, M.D., of Baltimore, Assistant in Gynecology, Johns Hopkins Hospital.

Rupture of the Sac of an Extra-Uterine Pregnancy Through the Fimbriated Extremity Without Tearing the Fallopian Tube; Operation, Recovery. By Hunter Robb, M.D., Resident Gynecologist to the Johns Hopkins Hospital, Baltimore, Md. Reprinted from *The New York Journal of Gynecology and Obstetrics*, February, 1892.

Open Incision on the Concave Surface in the Treatment of Inveterate Cases of Talipes Equino-varus. By B. E. McKenzie, M.D., Toronto. Reprinted from the Transactions of the American Orthopædic Association.

Publications from the Biological Laboratory of the University of Toronto. No. II., "Peach Yellows." By W. R. Shaw, M.D., Toronto. Reprinted from the Transactions of the Canadian Institute, Vol. II., Pt. 2.

Supracotyloid Dislocation. By John Ridlon, M.D., Consulting Surgeon to the Transfiguration Clinic; Assistant Surgeon to the Vanderbilt Clinic, New York. Reprinted from *The New York Medical Journal.*

Technical Education. Address delivered by Professor Galbraith at the opening of the Engineering Laboratory of the School of Practical Science, Toronto, Feb. 24th, 1892.

On the Collection of Samples of Water for Bacteriological Analysis. By Wyatt Johnston, M.D., Montreal.

Transactions of the College of Physicians of Philadelphia. Third series. Volume the thirteenth, 1891.

Climate of Southern California in Relation to Disease. By W. A. Edwards, M.D.

Electricity in Carcinoma. By R. Newman, M.D., New York.

Trap-Siphonage and Trap-Seal Protection. By Prof. J. E. Denton.

Bald Heads. By A. E. Carrier, M.D., Detroit.

Personal.

DR. J. H. BURNS, of Toronto, after a visit of a few weeks to California, returned to Toronto, April 16th. He reports that Dr. Winstanley is enjoying fairly good health. Dr. George Wright, formerly of Toronto, is living at Redlands. He is suffering from bronchitis and asthma, and has become very thin, but is able to do a certain amount of practice. Dr. Bull, of Toronto, who spent the winter there with a portion of his family, is in good health.

DR. W. OLDRIGHT, of Toronto, went to Philadelphia, April 25, and will carefully inspect the new laboratory of Hygiene of the University of Pennsylvania, with a view of gaining information which will be of service to the University of Toronto in the establishing of the proposed course for health officers and a Museum of Hygiene.

DR. J. L. BRAY, of Chatham, was in Toronto, April 20th to 22nd. As President-elect of the Dominion Medical Association, he is trying to work up plenty of enthusiasm for the next meeting, to be held in Ottawa probably the first week in June.

DR. LAPTHORN SMITH, of Montreal, has opened a private hospital for the medical and surgical treatment of diseases of women.

DR. WISHART, of London, who was seriously ill with pneumonia, is now recovering.

DR. PRICE-BROWN has removed from No. 10 to his new residence, No. 37 Carlton street.

Therapeutic Notes.

TUMENOL.—A suphonated preparation of hydrocarbons is obtained near Darmstadt in the form of bitumen. The preparation can be used in three forms: (1) Tumenol itself—a dark-brown or brownish-black liquid; (2) tumenol sulphone, or oil; (3) tumenol sulphonic acid, or powder. Moist compresses, soaked with 2 to 5-per-cent. solution of the sulphonic acid, were often very successful in the treatment of acute recurrent eczema of the hands and face. In the form of a paste (5 to 10 per cent.), tumenol oil proved more effective than the simple zinc paste to a marked degree, not only in eczema, but in superficial ulceration, impetigo, and pemphigus. An ointment of similar strength, with 5 per cent. of zinc oxide and subnitrate of bismuth, containing simple ointment as a base, was also largely used by Professor Neisser. The power of tumenol to relieve itching, not only in eczema and other forms of dermatitis, but also in prurigo and pruritus, was very marked, especially when used in the form of 10-per-cent. tinctures, with a menstruum consisting of equal parts of ether, rectified spirits, glycerine, or water. The new article is not intended or likely to compete with ichthyol.—*The Provincial Med. Jour.—Satellite.*

PETRESCO claims to have cut short croupous pneumonia by large doses of digitalis in from twenty-four to forty-eight hours, during which time he has observed an abrupt fall of temperature from 106.5° F. (the highest seen) to 98°, 96.8°, and even 95° F., together with a marked reduction of the pulse, which from as high as 140, and even higher, was brought down to 60, 40, 30, and in one remarkable instance to as low as 24. In 825 cases treated by him since 1883, exclusively by large doses of the drug, he has had a mortality of 2.06 per cent. Bennet obtained under the tonic treatment a mortality of 3 per cent. in 129 cases, and a mortality of 6.08 per cent. in 720 cases under the expectant treatment. In Edinburgh, in a record of 698 cases treated by venesection alone, the mortality was 3.45 per cent., which speaks for itself. Petresco used 60 to 90 grains (4 to 6 grammes) a day, in infusion, for three and four days consecutively, and in these doses never noticed untoward effects, such as vomiting, diarrhœa, disturbance of the pulse, and, much less, collapse.—*Med. and Surg. Rep.*

PAPAIN.—As a digestive ferment, to be given medicinally, papain presents the following advantages over pepsin and pancreatin:

(1) It will convert or digest many more times its own weight of meat than they are able to.

(2) It can be used when pepsin and pancreatin are contra-indicated or powerless. (This latter, as known, is the case when the stomach contents are too concentrated or insufficiently

acid. Under these conditions pepsin is of little or no value, while papain acts energetically.)

(3) As regards albuminoids, it combines in itself the joint action of pepsin and pancreatin.

(4) It can be given combined with acids, alkalies, or antiseptics, as indicated by the demands of the case.

(5) It has a local action on the stomach that pepsin has not.

(6) It is not so repulsive to the mind as pepsin as it is purely vegetable.

Thus papain is indicated in deficiency of the gastric juice, excess of unhealthy mucus in the stomach, irritable condition of that viscus, and duodenal dyspepsia.—*Hershell on New Remedies, p. 86.*

MORPHINE IN CARDIAC AFFECTIONS.—The good effects of morphine, as a sedative to the dyspnœa and painful sensations in aortic affections, is to-day acknowleged by observant practitioners. In some mitral affections, morphine likewise is very useful. According to an able thesis of Dr. Hervouet, certain desperate cases of mitral affection were benefited by hypodermics of this remedy, the dyspnœa and nervous symptoms having been controlled. It seemed to strengthen the heart's action, provoking diuresis and diminishing anasarca. Through the means of morphine, patients apparently dying have been brought back to life when all other remedies of a stimulant character failed.—*Lancet-Clinic.*

INTRA-VENOUS INJECTION OF SALINE FLUID IN GRAVE HEMORRHAGE.—K. Poulsen, of Copenhagen, has been very favorably impressed with the action of the intra-venous injection of salt water (tepid distilled water, 6 per 1000 salt, and a little hydrate of soda) to the quantity of about three quarts into the veins of the arm of a woman aged thirty-six, who had complete collapse (no radial pulse), after a severe hemorrhage from the infra-orbital artery, occurring during resection of the superior maxilla for a carcinomatous growth, which had entirely involved the parts about the artery, making the arrest of the hemorrhage extremely difficult. Although the patient before the injection had been lying in a dying state, she was able a few hours later to give birth to a child safely.—*Bibliothek für Laeger*, May, 1891.—*Sattelite.*

Miscellaneous.

ONTARIO MEDICAL ASSOCIATION.

The twelfth annual meeting of the Association will take place in Toronto on Wednesday and Thursday, the 1st and 2nd of June. The session will be held each day at 9.30 a.m., 2.15 p.m., and 8.15 p.m.

The following topics have been selected by the Committee on Papers and Business for general discussion: "Diphtheria": Discussion opened by Dr. A. S. Fraser, Sarnia; followed by Dr. W. Britton, Toronto; Dr. T. S. Harrison, Selkirk; Dr. H. P. Wright, Ottawa. "The Third Stage of Labor": Discussion opened by Dr. A. H. Wright, Toronto; followed by Dr. H. S. Griffin, Hamilton; Dr. J. M. Cotton, Lambton Mills; Dr. N. W. Meldrum, Ayr. "The Present Status of Antiseptics in Surgery": Discussion opened by Dr. R. B. Nevitt, Toronto; followed by Dr. T. K. Holmes, Chatham; Dr. N. A. Powell, Toronto; Dr. Geo. A. Peters, Toronto. "The Therapeutics of Constipation": Discussion opened by Dr. J. C. Mitchell, Enniskillen; followed by Dr. A. McKinnon, Guelph; Dr. J. J. Farley, Belleville; Dr. Geo. Acheson, Toronto. "Hay Fever": Discussion opened by Dr. G. Hodge, London; followed by Dr. G R. McDonagh, Toronto; Dr. A. B. Welford, Woodstock; Dr. W. J. Wilson, Richmond Hill. "A Symposium upon Hip Joint Disease"; (1) The Early Diagnosis; (2) Expectant Treatment; (3) Operative Treatment, by Dr. I. H. Cameron, Toronto; (4) Mechanical Treatment before and after Operation, Dr. A. McKay, Ingersoll. "A Symposium upon the Pneumonias of Children": (1) Differential Diagnosis of Lobar and Lobular Pneumonia and of Pneumonia from Bronchitis, by Dr. H. T. Machell, Toronto; (2) Diagnosis of Lobular Pneumonia, Acute and Chronic, from Tuberculosis; (3) Diagnosis of Pneumonic Consolidation from Pleural Effusion, by Dr. W. H. Henderson, Kingston; (4) Prognosis in Pneumonias Generally, by Dr. Allen Baines, Toronto.

Papers will be read as follows: President's Address, Dr. R. A. Reeve, Toronto; "Chloroform Inhalation," Dr. H. A. MacCallum, London; "Acute Suppurative Pleurisy," a case, Dr. H. S. Clerke, Lucan; "Brain Injuries," Dr. J.

Olmstead, Hamilton; Ventral Hernia, Flap-splitting Operation," Dr. H. Meek, London; "Otitic Cerebral Abscess," Dr. G. Sterling Ryerson, Toronto; "Diphtheria," Dr. W. J. Wilson, Richmond Hill; "Herpes," Dr. H. J. Saunders, Kingston; "Disinfection after Infectious Disease," Dr. W. J. Greig, Toronto; "Ocular Paralysis from Basal Lesion," Dr. D. J. Gibb Wishart, Toronto; "Angina Ludovici," Dr. G. A. MacKelcan, Hamilton; "Report of three cases of Congenital Malformation of the Female Sexual Organs, with Remarks," Dr. A. VanderVeer, Albany; "The Dressing of the Womb after Suprapubic Cystotomy," Dr. A. Groves, Fergus.

Additional papers have been promised by Dr. Langrill, Osheeken; Dr. A. B. Welford, Woodstock; Dr. A. R. Harvie, Orillia; Dr. W. J. Gibson, Belleville; Dr. S. Lett, Guelph; Dr. H. Howett, Guelph; Dr. C. K. Clarke, Kingston; Dr. Jas. P. Brown, Owen Sound.

The names of readers and the titles of the papers proposed should be forwarded to the Secretary not later than the 10th of May, when it is at all possible.

The officers and committee for the coming meeting are as follows: *President*, Dr. R. A. Reeve, Toronto; *Vice-Presidents*, Dr. F. L. M. Grasett, Toronto; Dr. A. Groves, Fergus; Dr. H. J. Saunders Kingston; Dr. G. T. McKeough, Chatham; *General Secretary*, Dr. D. J. Gibb Wishart, Toronto; *Assistant Secretary*, Dr. F. P. Cowan, Toronto; *Treasurer*, Dr. E. T. Barrick, Toronto.

Credentials: Chairman, Dr. J. L. Davison, Toronto; Dr. W. H. B. Aikins, Toronto; Dr. G. M. Shaw, Hamilton; Dr. Lowry, Acton; Dr. Duncan, Chatham; Dr. Eakins, Belleville. *Public Health:* Chairman, Dr. P. H. Bryce, Toronto; Dr. S. S. Covernton, Spokane Falls; Dr. W. J. Charlton, Weston; Dr. J. J. Farley, Belleville; Dr. W. A. Ross, Barrie, Dr. Trimble, Queenston. *Legislative:* Chairman, Dr. Harrison, Selkirk; Dr. Bowlby, Berlin; Dr. Sullivan, Kingston; Dr. Waugh, London; Dr. McKay, Ingersoll; Dr. Gilmore, Toronto Junction. *Publications:* Chairman, Dr. Sheard, Toronto; Dr. A. H. Wright, Toronto; Dr. J. L. Davison, Toronto; Dr. A. Primrose, Toronto; Dr. H. J. Saunders, Kingston; Dr. W. H. B. Aikins, Toronto. *By-Laws:* Chairman, Dr. W. H. Henderson, Kingston; Dr. R. A. Reeve, Toronto; Dr. Griffin, Hamilton; Dr. J. E. Graham, Toronto; Dr. H. A. MacCallum, London. *Ethics:* Chairman, Dr. G. R. McDonagh, Toronto; Dr. Moore, Brockville; Dr. A. R. Harvie, Orillia; Dr. J. W. F. Ross, Toronto; Dr. Moorehouse, London; Dr. H. C. Wright, Ottawa. *Papers and Business:* Chairman, Dr. A. McPhedran, Toronto; Dr. B. Spencer, Toronto; Dr. R. B. Nevitt, Toronto; Dr. J. Wishart, London; Dr. Fenwick, Kingston. *Arrangements:* Chairman, Dr. A. J. Johnston, Toronto; Dr. A. A. Macdonald, Toronto; Dr. W. Oldright, Toronto; Dr. Jas. F. W. Ross, Toronto; Dr. J. J. Davison, Toronto; Dr. G. A. Bingham, Toronto; Dr. A. Davidson, Toronto; Dr. L. M. Sweetnam, Toronto; Dr. W. J. Greig, Toronto. *Audit:* Chairman, Dr. P. Strathy, Toronto; Dr. J. Brown, Owen Sound; Dr. G. S. Cleland, Toronto; Dr. D. Hoig, Oshawa. *Necrology:* Chairman, Dr. Mullen, Hamilton; Dr. Duncan, Chatham; Dr. Lundy, Preston; Dr. Buchan, Toronto.

The chairman of the various committees are urged to convene their committees and have their reports in readiness.

Physicians who are desirous of joining the Association require to present nomination papers signed by two members in good standing. Blank forms may be obtained from the Secretary.

Delegates to this meeting will obtain return tickets at one fare and one-third by applying to the station agent at the starting point.

D. J. GIBB WISHART,

Toronto, April 25, 1892. *Secretary.*

TRINITY UNIVERSITY.—The following are the results of the

PRIMARY EXAMINATION.

Class I.—A. L. Danard and R. King (equal as silver medallists and for certificates of honor); C. D. Parfit, H. R. Frank, L. Lapp, B.A., T.G. Devitt, G. H. Field and F. C. Harris (equal); J. L. Bradley, J. D. Windell, J. Semple, A. K. Ferguson, H. E. Armstrong are awarded certificates of honor. The following are also placed in the first class: H. Livingstone, P. D. White, A. R. Colvin, T. Kerr, W. H. Scott, C. M. Kingston, C. H. Thomas.

Class II.—F. G. Storey, E. L. Proctor, G. Alexander and J. M. Jory (equal), T. A. Manes, M. Baker, A. McKay, A. G. A. Fletcher, Miss J. S. Shirra and J. T. Somerville (equal), J. S. Matheson, J. C. Hay.

Class III.—Miss G. W. Hulet, F. S. Nicholson and D. Thompson (equal), W. W. McQuan, T. N. Insley and Miss Pringle (equal), M. F. Lucas, F. N. Henry, J. W. White.

Passed in anatomy, general and practical chemistry, physiology, and toxicology—Rev. J. W. Dow.

Passed in anatomy, general and practical chemistry, materia medica, and physiology—R. R. MacFarlane.

Passed in general and practical chemistry, physiology, and toxicology—J. H. Hudson, J. W. McQueen.

Passed in anatomy, physiology, toxicology, and practical chemistry—E. R. Brown.

Passed in anatomy, materia medica, physiology, and toxicology—F. A. White.

Passed in materia medica, physiology, and toxicology—W. J. Bray.

FINAL EXAMINATION.

Class I.—H. B, Anderson, gold medallist and certificate of honor. A. S. Tilley, W. E. Sitzer, H. C. Parsons, H. L. Barber, R. M. Mitchell, R. N. Fowler, F. Fenton and Miss J. Gray (equal), D. McEachren, C. McPhail are awarded certificates of honor. The following are also placed in the first-class—W. Potter, W. E. Mathew, A. P. Chalmers, J. J. Thompson, T. B. Scott, B.A., J. W. Bryen, A. M. Cleghorn.

Class II.—J. A. Kemp, G. J. McKee, R. M. Curts and A. W. Allingham (equal), D. A. McPherson, T. M. Williamson, G. K. McDowell and D. A. Beattie (equal), B. O. Coates, Miss E. R. Gray, E. B. Blain, A. Flath, N. Anderson, M. Ferguson, E. O. Bingham and Miss B. Dymond (equal), W. Reid, J. J. Roach and W. E. Ogden and H. J. Orchard (equal).

Class III.—E. F. McCullough, T. M. Allen, F. N. Henry, J. A. Mitchell, Miss A. Chalmers, W. J. Proctor and W. M. Anderson and J. W. Wheeler (equal), H. Morell, A. L. Murphy, W. C. Belt, H. J. Denovan, E. W. Goode, A. P. McLaren, F. Lucas, J. White.

Passed in medicine, midwifery, surgery, clinical medicine, clinical surgery, and sanitary science—R. E. Cooper, G. W. Davidson, A. Quackenbush.

A MILITARY MEDICAL ASSOCIATION—It is proposed to form an association of medical officers of the militia of Canada, having the following objects: (1) The bringing of medical officers in closer personal relation, and the development of a departmental *esprit de corps*. (2) For discussion of matters relating to the medical department of the militia. (3) For the discussion of military matters from a medical point of view. (4) For reading of papers on military medicine and surgery, hygiene, and equipment. A meeting for organization will be held in the Canadian Military Institute on Monday, May 9th, at 8 p.m.

NEW DOCTORS. — The following candidates have passed the final examinations in Victoria University for the degree of M.D., C.M.: A. Cleghorn, F. Forrest, F. K. Armstrong, Mrs. E. H. R. Denovan, H. Morell, G. H. Bowles, H. J. Way, J. R. Smith, J. F. Ross, W. J. Wilson, G. L. McBride, J. McFadgen, L. H. Campbell, G. Clingan, F. McConaghy, A. Flatt, W.J. Smuck, J. Dargavel, J. F. Pinkham, D. A. Clark, W. C. Belt, J. A. Cowper, J. Farrow, A. Skippen, W. R. Hamilton, F. A. Rosebrugh, J. H. Towner, W. L. Holmes, F. M. Henry, F.C. Trumpour, J. J. Roach, J. A. C. Grant.

OSLER'S "PRACTICE OF MEDICINE."—The hearty reception of Osler's new book was phenomenal. The first edition of three thousand was soon exhausted, and a second is well under way. There appears to be a general consensus of opinion that our reviewer was right in designating it the best handbook on medicine extant.

THE *Northern Lancet and Pharmacist*, of Winnipeg, has been resuscitated.

THE CANADIAN PRACTITIONER is printed for the Publishers by Messrs. BROUGH & CASWELL, 14 to 18 Bay St., Toronto. Messrs. Brough & Caswell make a specialty of fine office stationery for Physicians' use, and of announcements, calendars, etc., for medical institutions. Correspondence solicited.

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TORONTO, MAY 16, 1892.

Original Communications.

THE ORIGIN OF INSANITY.*

BY DR. R. M. BUCKE, ASYLUM FOR INSANE, LONDON, ONT.

Read at the meeting of Medical Superintendents of Institutions for Insane in North America, at Washington, D.C., May 6th, 1892.

Putting aside such comparatively rare causes as traumatism, sunstroke, and syphilis, and, speaking broadly and generally, the etiology of insanity, as generally given, may be reduced to two heads:

(1) Heredity.

(2) Mental, emotional, or bodily strain, one kind or another.

But it is an obvious criticism that we must have insanity before it can be inherited, and that strain of every conceivable kind and degree is undergone by thousands of persons every day, and even carried to the point of causing death, without resulting in insanity.

This being the case, it seems clear that we must revise our theory of the causation of the group of maladies in question, and I am anxious to add my mite toward a truer and more comprehensive explanation.

Some here present may perhaps pay me the compliment of remembering that ten years ago, at Cincinnati, I read a paper on the "Growth of the Intellect." In it I tried to show that human intelligence, starting far back in our remote ancestry from an aboriginal germ concept or precept, and, as it were, sprouting therefrom, as a tree from its seed, became by a process of division and branching extending through many milleniums the manifold and highly organized function that we know by that name at present. However well or ill I may have succeeded in my self-imposed task, nothing is more certain to-day than that the intellect did come into existence in the manner indicated—that is, by a long process of gradual evolution. In the same address I pointed out that ancient literature, philology, and the science of optics all concurred to prove that our color sense is comparatively modern—that it probably did not exist when the Aryans, before their dispersion, still lived, a pastoral horde, in their original home, whether in Bactria, the Caucasus, or northern Europe; and I concluded my discourse by citing evidence that the sense of fragrance is still more modern than is the sense of color.

To-day I want to broaden what I said ten years ago into a general proposition to the following effect: The human mind, including in that term the intellect, moral nature, and senses, is made up of a large number of faculties done up, as it were, in bundles. Thus the intellect is one bundle, and in it we have consciousness, self-consciousness, perception, conception, comparison, judgment, imagination, sense of humor, memory, and so on. The moral nature is another bundle, and in it we have love, reverence, faith, fear, hope, hate—each one of which, and many more left unnamed, could be, as you know,

*I desire to state that the following pages are from a work in course of preparation, to be named "Cosmic Consciousness."

subdivided almost *ad infinitum* into degrees and varieties of those passions. Sight is another bundle. In it we have the sense of light and darkness, of form, of distance, of perspective, the color sense, and so on. The sense of hearing, another, made up of the sense of loudness, of distance, of pitch, of direction, of the musical sense, and so on.

It is needless to extend the catalogue. I do not require to tell any person present (except for the sake of making my statement full and accurate) that the human mind is thus composed of groups of functions having certain definite relations one to the other, just as the fauna and flora of any given country is composed of groups of organisms having certain definite relations one to the other.

The next step in my argument or statement is to point out that as the human mind itself was not always in existence, but at some time or other was born and afterwards grew to what we see to-day, that so each one of these numerous faculties of which it is composed came into existence at some time or other.

And now comes the pivot fact upon which my thesis finally rests, namely, that the faculties in question are not all of the same age, but, on the contrary, some of them are very old (millions of ages), some very young (only a few thousand years), while others are of various ages between the extremes. How do we know this? Well, the length of time the race has been possessed of any given faculty may be estimated from various indications. In cases in which the birth of the faculty belongs to comparatively recent times (as in the case of color sense and the sense of fragrance), philology and human records, as pointed out by Geiger, may assist materially in determining the age of its appearance; but for the comparatively early-appearing faculties, such as the initial intellect, self-consciousness, the sexual instinct, or love of offspring, these means necessarily and obviously fail us. We fall back, then, upon the two following tests:

(1) The age at which the faculty in question appears in the individual, and

(2) The more or less universality of the faculty in the members of the race.

(1) As ontogeny is nothing less than philogeny *in petto*, that is, as the evolution of the individual is necessarily a repetition in a condensed form of the evolution of the race, simply because it cannot, in the nature of things, be otherwise—cannot, that is, follow any other lines—there being no other line for it to follow, it is plain that organs and functions (speaking broadly and generally) will appear in the individual in the same order in which they appeared in the race; and the one being known, the other may with considerable confidence be assumed.

(2) When a new faculty appears in a race, it will be found at the very beginning in one individual, and one only, of that race. Later, it will be found in a few individuals; later, in a small percentage of the individual members of the race; later, in half the members, and so on, until, after thousands of generations, an individual who misses having the faculty is regarded as a monstrosity. In illustration of this statement compare, in man, the musical sense (a faculty just coming into existence) with self-consciousness, a faculty perhaps more than ten thousand generations old; or, should it be thought that the facts in these cases are assumed for the purpose of the argument, consider the case of the color sense, the age of which can be approximately fixed by philology. This sense has existed in the race barely a thousand generations, and to-day, in the British Islands, it is said to fail to appear in but one person out of every sixty. The musical sense fails to appear, in the same country, probably in forty persons out of sixty, while self-consciousness, perhaps, does not fail to appear more than a few dozen times in six thousand adult persons.

In order to illustrate how more or less universality in the race, along with the time of appearance in the individual, corresponds with the time of appearance of any given faculty in the race, the following facts may be given:

Self-consciousness appears in the individual at the age of about three years, and is fairly universal in the race. This is the basic human faculty, the faculty which constitutes its possessor man. Our ancestors, before they had this faculty, whatever they were, were not men. But we do not draw the line so sharply now. There are thousands of idiots and imbeciles who never become self-conscious, and there must be many members of low races, such as

Bushmen and Australians, who never attain to this faculty, but still we call these men. Self-consciousness has been in existence as long as man has been in existence—probably a few hundred thousand years.

I have said that self-consciousness appears in the average civilized man at the age of about three years. But consciousness of an external world is present in the individual man from, or almost from, birth; some three years, therefore, earlier than self-consciousness.

This faculty (that is, simple consciousness) appeared in our ancestors very many million years before self-consciousness; and while many so-called men have not self-consciousness, there is perhaps no creature which can by any latitude of speech be called man in whom simple consciousness is not found; that is, it is absolutely universal in the human race. Compare, now, these fundamental faculties with some which are comparatively modern.

The color sense comes into existence gradually in the individual; at three or four years of age there may be a trace of it. At eight years of age it was found by Jeffries still absent in a large percentage of children. Twenty to thirty per cent. of schoolboys are said to be color blind, while only four per cent. of adult males are so. Dr. Favre, of Lyons, reported in 1874 to the French Congress for the Advancement of Science at Lille certain observations that seemed to him to prove that congenital color blindness was curable; it does not seem to have occurred to him that the sense is normally absent in the very young. As mentioned above, the color sense is said to be absent in one out of every sixty adult persons in the British Islands; the age at which it normally appears, therefore, and its degree of universality, correspond with the time of its appearance in the race, which, according to Geiger's researches (based largely on philology), was about a thousand generations ago.

The human moral nature includes many faculties, but for the purpose of the present argument it may be treated as if it were a simple sense. It comprises what we call conscience—sense of right and wrong; sexual love as distinguished from sexual passion or instinct; parental and filial love as distinguished from the corresponding instincts; love of our fellow-men as such; love of the beautiful; awe, reverence, sense of duty, of responsibility, pity, compassion, faith. No human moral nature is complete without these and others unnamed here.

Now at what age does the human moral nature appear in individual man? You all know it is never present in quite young children. You all know it is often still absent at puberty and even at adolescence. It is a late acquired faculty, considerably later than the color sense. Then in what proportion of men and women does it fail to appear? There are so many adult men and women who have a partial moral nature, so many who, having little or no moral nature, wear (as well as may be) the outside semblance of one—the judging of men and women from this point of view is so difficult, the problem is so veiled and so complicated, that it is impossible to give more than an opinion. But read Prosper Despine's "Psychologie Naturelle," read Havelock Ellis and other authors on criminal anthropology, consider the number of people with whom we, as alienists, are brought into contact who manifestly, often confessedly, have few or none of the elements of the faculty in question, and I think you will be forced to agree with me that the number of adults who have little or no, or an undeveloped, moral nature is far greater than the number who have little or no, or an undeveloped, color sense.

Turn now, for a moment, to the musical sense; this, far from being universal, is more often absent than present; is never present, except in such a monstrosity as Mozart, before full or well on to full maturity, and only dates back at most perhaps a few thousand years. It is an instance of a faculty in the act of appearing, not yet fully declared.

A description in detail of the evolution of the faculties of which the human mind is composed would fill a large volume, and, in order to write such a volume, far more knowledge and far greater capacity would be needed than the present writer can pretend to. What has been said may serve to indicate the truth of the general thesis that these faculties are of all ages, some being very ancient, others very modern, and still others of intermediate date.

The next link in the present chain of argument may be expressed as follows: In any

race the stability of any faculty is in proportion to the age of the faculty in the race; that is, a comparatively new faculty is more subject to lapse, absence, aberration, to what is called disease, and is more liable to be lost, than an older faculty. To many this proposition will seem a truism. If an organ or faculty has been inherited in a race for, say, a million generations, it seems *a priori* certain that it is more likely to be inherited by a given individual of that race than is an organ or faculty which originated, say, three generations back. A case in point is what is called genius. Genius consists in the possession of a new faculty or new faculties, or in an increased development of an old faculty or old faculties. That being the case, you all know that it was necessary for Galton to write a good-sized volume to prove that genius is hereditary, so far was it from being an obvious fact that it is so; and even yet the heredity of genius is far from being universally accepted. But no one ever wrote a book to prove that sight, hearing, or self-consciousness are hereditary, because every one knows without any argument that they are so. On the point in question Darwin says, speaking of horses: "The want of uniformity in the parts which at the time are undergoing selection chiefly depends on the strength of the principle of reversion"; that is, parts or organs which are undergoing change by means of selection are liable to lose what has been gained by reverting to the initial condition. And, again, he says: "It is a general belief among breeders that characters of all kinds become fixed by long-continued inheritance." In another place he speaks of "the fluctuating, and, as far as we can judge, never-ending variability of our domestic productions, the plasticity of their whole organization," and he attributes this instability to the recent changes these have undergone under the influence of artificial selection. And in still another place Darwin speaks of "the extreme variability of our domesticated animals and cultivated plants."

But I scarcely need carry this part of the argument any further. You will probably all admit that the shorter time an organ or faculty has been possessed by a race the more unstable must it be in the race, and, consequently, in the individual; the more liable will it be to be dropped; the more liable to be defective; the more liable to vary; the more liable to be or to become imperfect—as we say, diseased; and that, per contra, the longer time an organ or faculty has existed in any race the more certain it is to be inherited and the more certain it is to assume a definite, typical character, *i.e.*, the more certain it is to be normal, the more certain it is to agree with the form or type of the said organ or faculty; in other words, the less likely is it to be imperfect—what we call defective or diseased. This being allowed, it will readily be granted (1) that the race whose evolution is the most rapid will (other things being equal) have the most breakdowns, and (2) that, in any given race, those functions whose evolution is the most rapid will be the most subject to breakdowns.

If these principles be applied to the domesticated animals (who have, most of them, within the last few dozen generations, been much differentiated by artificial selections) they will explain what has often been looked upon as anomalous, namely, the much greater liability to disease and early death of these as compared with their wild prototypes; for that domestic animals *are* more liable to disease and premature death than wild is, I believe, admitted on all hands. The same principles will explain also how it is that the more highly bred an animal is, *i.e.*, the more widely it has been differentiated in late generations from a previous type, the more liable will it be to disease and premature death.

Taking, now, these principles home to ourselves—to the human race—we find them to mean that those organs and functions which have been the latest acquired will be most often defective, absent, abnormal, diseased. But it is notorious that in civilized man, especially in the Aryan race, the functions which have suffered most change in the last few thousand years are those called mental—that great group of functions, sensuous, intellectual, moral, which depend upon, spring from, the two great nervous systems, the cerebro-spinal and the great sympathetic. This great group of functions has grown, expanded, put forth new shoots and twigs, and is still in the act of producing new faculties at a rate immeasurably greater than any other part of the human organism. If this is so (and we all know it is so), then within this great con-

geries of faculties it is inevitable that we should meet with constant lapses, omissions, defects, breakdowns.

Clinical observation teaches us every day that the above reasoning is solidly grounded. It presents to us lapses of all degrees and in unlimited varieties—lapses in sense function, such as color blindness and music deafness; lapses in the moral nature, in whole or in part; lapses in the intellect, of one or several faculties, or lapses, more or less complete, of the whole intellect, as in imbecility and idiocy. But over and above all these lapses, and as a necessary accompaniment of them, we have the inevitable breaking down of function which has once been established, which we call *insanity*, as distinguished from the various forms and degrees of *idiocy*. For it is easy to see that if a function or faculty belonging to any given species is liable for any general cause to be dropped in a certain proportion of the individuals of that species, it must also be liable to become diseased, that is, to break down in cases where it is not dropped. For if the faculty in question is by no means always developed in the individual, if it quite frequently fails to appear, that must mean that in many other cases in which it does appear it will not be fully and solidly formed. We cannot imagine a jump from the total non-appearance of a given function in certain members of a species to the absolute perfection and solidity of the same function in the rest of the members. We know that species do not grow that way. We know that in a race in which we have some men seven feet high, and others only four, we shall find, if we look, men of all statures between these extremes. We know that in all cases extremes presented by the race are bridged (from one to the other) by full sets of intermediary specimens. One man can lift a thousand pounds, another can only lift a hundred, but between these are men the limit of whose strength fills up the whole gap between the hundred and the thousand pounds. One man dies of old age at forty years, another at one hundred and thirty years, and every year and month between forty years and one hundred and thirty years is the limit of some man's possible life. The same law that holds for the limit of faculties holds also for the solidity and permanence of faculties. We know that in some men the intellectual functions are so unstable that as soon as they are established they crumble down—crushed, as it were, by their own weight—like a badly built house, the walls of which are not strong enough to sustain the roof. You all know that I refer to extreme cases of so-called developmental insanity, cases in which the mind falls into ruins as soon as it comes into existence, or even before it is fully formed; cases of insanity, of puberty, and adolescence, in which nature is barely able to form or half form a normal mind, and totally unable to sustain it, and it consequently runs down at once back into chaos. You know the hopelessness of this class of cases (as regards recovery), and it is not difficult to see why they should, and must, be practically incurable, since their very existence denotes the absence of the elements necessary to form and maintain a normal human mind in the subjects in question.

In the realm of insanity properly so called—that is, excluding the idiocies—these cases occupy the extreme position at one end of the scale, while those persons who only become maniacal or melancholic under the most powerful exciting causes, such as childbirth and old age, occupy the other end. That is, we have a class in whom the mind, without a touch, crumbles into ruin as soon as formed, or even before it is fully formed. Then we have another class in which the balance of the mental faculties is only overturned by the rudest shocks, and then only temporarily, since the cases to which I refer recover in a few weeks or months if placed under favorable conditions. But between these two extremes, as you all well know, we have the whole wide space filled with an infinite variety of phases of insanity, exhibiting every possible condition of mental stability and instability between the two extremes mentioned. But throughout the whole range of the insanities you will find this law hold, namely, that the latest evolved of the mental functions, whether intellectual or moral, suffers first and suffers most, while the earliest evolved of the mental and moral functions suffer, if at all, the latest and the least.

If the mind be likened to a growing tree (a perfectly apposite simile), then one may say that the lesser onsets of insanity shrivel its leaves—paralyze or partially paralyze their functions for

a time—the leaves standing for the later formed and more fragile emotions and concepts, and especially for the later-formed combinations of these; that deeper attacks kill the leaves and damage the finer twigs; that still more profound disturbances kill the finer twigs and injure the larger, and so on, until in the most profound and deep-rooted insanities, as in the developmental dementias, the tree is left a bare, ghastly trunk, without leaves or twigs, and almost without branches. And in all the process of destruction the older-formed faculties, such as perception and memory, appetite for food and drink, shrinking from injury, and the more basic sense functions, endure the longest, while, as has been said, the latest evolved functions crumble down first, then the next latest, and so on.

A fact that well illustrates my main thesis, namely, that insanity is essentially the breaking down of mental faculties which are unstable chiefly because they are recent, and that it rests therefore upon an evolution which is modern and still in progress—a fact, I say, that well illustrates this thesis is the comparative absence of insanity among negroes.

I have said, as you know, that the large percentage of insanity in America and Europe depends directly upon the rapid evolution in late millenniums of the mind of the Aryan people. I suppose very few would claim that the negro mind is advancing at anything like the same rate. As a consequence of these different rates of progression, we have in the Aryan people of America a much higher percentage of insanity than is found in the negro race.

When the United States census of 1880 was taken, it was found that among 43,000,000 white people there were 86,000 insane, exactly one in 500; while among 6,750,000 negroes only a little more than 6000 were insane, or a proportion of only about one to 1100.

Doubtless if we had statistics of other backward and stationary people a similar state of matters would be found; all such facts as we have leading to the conclusion that among savages and semi-savages there exists comparatively little insanity.

In conclusion, the results at which I have arrived in this paper may be summed up as follows:

(1) All mental faculties arose each in its time, and they are of all ages, many of them being quite modern.

(2) The date of birth of a faculty in the race may be judged by the age at which it appears in the individual, and its more or less universality in the race.

(3) The stability of a faculty in the individual depends upon its age in the race; the older the faculty the more stable it is, and the less old, the less stable.

(4) Consequently the race whose evolution is the most rapid will have the most breakdowns.

(5) Those functions in any given race whose evolution is the most rapid will be the most subject to breakdowns.

(6) In the more progressive families of the Aryan race, the mental faculties have for some millenniums last past developed with great rapidity.

(7) In this race the large number of mental breakdowns, commonly called insanity, are due to the rapid and recent evolution of those mental faculties.

INVESTIGATIONS UPON THE ETIOLOGY OF MOLLUSCUM CONTAGIOSUM.*

BY W. R. SHAW, M.D.

(From the Biological Laboratory of the University of Toronto.)

Since the first authentic description of this disease by Bateman, much doubt and a great deal of controversy have been incited both as to its pathology and its contagiousness.

It was at first considered to be a disease of the sebaceous glands, in which the duct became obstructed, the gland continued secreting, and as a result a small tumor was formed with a contents, which was said to consist of the secretion of the gland, somewhat altered, of some fat globules, and of a number of distinct, clear oval bodies, which were styled "molluscum bodies," and which were supposed to be the cause of the disease.

In 1865 the true nature of its pathology was described by Virchow, who maintained that it had nothing whatsoever to do with the sebaceous glands, and that the characteristic growths

*Read before the Toronto Pathological Society.

were due to a hyperplasia of the cells of the rete malpighii at the mouths of the hair follicles.

Sangster,[1] in 1888, advanced views in support of the above, and gradually it has become recognized that the seat of origin of molluscum warts is in the rete. The last, as far as I am aware, who has strongly supported these views has been Dr. A. B. Macallum[2] in his article on "The Histology of Molluscum Contagiosum." He says: "Whether the molluscum growths do originate in hair follicles or in sebaceous glands cannot be determined from my preparations. In all these the stratum mucosum of the epidermis is the part which has given origin to the growth." Figures demonstrate these facts. Further on he remarks: "In yet later stages the corneous material may form a column and simulate a hair shaft, or, when it has fallen out of the preparation, the epithelial down-growth with its central cavity may resemble a gland duct. Such stages have doubtless been seen by others, and they may have given rise to the conclusion that the molluscum growth originates in the hair follicles or in the sebaceous glands." On this portion of the pathology I think I can finally say that the belief is now generally held that the disease arises from the rete malpighii.

Whether the disease is contagious or not has also been one of the disputed characteristics of this affection. The majority of English and American authorities claim that it has this peculiarity; while, on the other hand, those of the continent hold generally the opposite view. It appears to me that the clinical data of each year confirm the contagious nature of the disease, and reference to text-books on diseases of the skin and of cases cited in the various journals serve only to strengthen this idea. It is only necessary to refer to a series of cases which have occurred in the Infants' Home to demonstrate its contagiousness. Dr. J. E. Graham[3] has given a full account of it in *The Journal of Cutaneous and Genito-Urinary Diseases*, from which I shall take the liberty of quoting some sentences:

"In June, 1888, a child was brought into the Home who was noticed to have small warty growths on the face and neck. Remained for three months in the infirmary. She, with several others, was then sent to one of the large nurseries, which accommodates about twenty children and which is generally fully occupied . . . Five months after this patient had entered the Home, and two months after she was brought into the nursery, four inmates of the latter were found to be affected." "From that time until the present the disease has existed in that nursery." "Fifteen children in all have been affected, 10 males and 5 females."

Another point which has, perhaps, excited the most controversy has been with regard to the "molluscum bodies." They were first considered to be parasitic in nature, and were thought to be the *contagium vivum* of the affection; one authority in St. Louis describing them as cryptogamic spores. In 1875, C. Boeck showed that molluscum bodies were the degenerative changes (affecting nucleus first) in cells identical with the cells of the rete, the change being neither fatty nor amyloid. In the same year Lubowski demonstrated the epidermal nature of the disease, and believed the molluscum bodies were the results of degenerative changes in the wandering cells of the rete.

Still later Neisser[4] has expressed his views to the effect that, in his mind, these are coccidia. He has not, as yet, been able to cultivate them, nor has he succeeded in producing the disease by inoculation. At present no definite expression of opinion as to the nature of these bodies can be formulated.

Dr. Macallum, referring again to his article, comes to the conclusion that they are altered plasmosomata, and the whole process is one of "hyperchromatosis."

I took up these investigations in March, 1891, with a view to find, if possible, some organism which might explain the contagiousness of this disease. As far as I have been able to ascertain, no one, as yet, save Dr. Angelucci,[5] of Rome, has attributed the disease to a micro-organism. His work was done some time prior to 1881, and the results were made known at the Medical Congress that year, which was held in London.

He goes on to state that he had found a

1. A. Sangster, *British Medical Journal*, 1880, p. 327.
2. Dr. A. B. Macallum, *Journal of Cutaneous and Genito-Urinary Diseases*, March, 1892, Vol. X., p. 95.
3. March, 1892, Vol. X., p. 90.
4. Jahresbericht Pathogenen Mikro-organismen, etc. Baumgarten, 1888, p. 315.
5. Transactions of the International Congress, Vol. III., 1881, p 149. Section, Diseases of the Skin.

bacillus which is common to molluscum, psoriasis, and papular eczema. It is somewhat similar in its appearances to the bacterium termo, and he had given it the name bacterium lepogenum. It had been successfully cultivated in the ordinary media, and its spore formation, etc., were all described by him. As to experiments on animals to produce the disease in which his bacterium had been found, he makes no mention. He further claimed to have found it in the tissues of the molluscum, when stained in the ordinary way for investigations for bacteria. But he somewhat invalidated his statements by the remark that bacteria were easily distinguished from elaidin granules, in that the latter did not take up aniline dyes, which, numerous observers since then have demonstrated is not the case. In the discussion which followed, Dr. Vidal, of Paris, remarked that he had once produced the disease by inoculation, and had found both bacilli and micrococci in the molluscum growths. The consensus of opinion seemed to oppose Dr. Angelucci's theories and to doubt his having found a specific organism. Regarding the investigations which I have pursued I must differ from the above, and although not as yet in a position to give a positive opinion that the micrococcus, which has been always found, is the specific cause of the disease, owing to the unsuccessful results of inoculation experiments, yet I feel sure that it is in some way connected with it. There has been much difficulty in staining this micrococcus in the tissues on account of the impossibility to decolorize the molluscum bodies, and also the very similar appearance between elaidin granules and micrococci. However, since this paper was begun a fresh supply of material was obtained, and from the contents of an unbroken molluscum wart smears were made and stained in the ordinary manner, and in each smear examined a micrococcus was alone found, in large numbers, being similar in appearance to that which I have cultivated. This is the first positive result yet obtained.

Some doubt was held last autumn as to this particular organism being peculiar to this disease, owing to the fact that Prof. Welch, of Baltimore, had found a similar form inhabiting the deeper layers of the epidermis, and to which we gave the name "staphylococcus epidermidis albus"; but from the fact of its growing in gelatine and liquefying it, and also growing at the temperature of the room, it seems safe to conclude that they are quite different, as the micrococcus of molluscum contagiosum will not grow in gelatine (alkaline) nor liquefy it, nor yet will it grow at the ordinary room temperature.

The greatest care has been exercised to obtain the material as free as possible from outside contaminations, and already on seven different occasions has the same micrococcus been obtained, and in only two sets of tubes has anything else been found, and that has been the ordinary yellow sarcina, which is so abundant in the air. Once the warts were kept for two weeks in a dry state in sterilized tubes and then crumbled up with sterilized forceps, and this material, scattered on the surface of glycerine agar, again gave the same results as in those tubes made from the freshly obtained growths.

Description of the micrococcus: It is round, medium-sized, measuring 0.6-0.9*m* in diameter, occurring frequently in pairs, and sometimes going in short chains of three or four, and again it is found in groups of nine or ten joined together in zoogloea masses.

Stains with alkaline methyl blue, carbolic fuchsin. Is not decolorized by Graham's method, but is by Neillsen's tubercle stain.

Hang drop: no movement.

In the original glycerine agar-agar smear tubes, after being twenty-four hours in the thermostat, the surface is found to be covered with small round disseminated colonies, which are yellowish-tinged white, opaque, and frequently many are confluent, giving to the whole surface of the smear a mottled appearance. Under low power: Round, smooth, yellowish-white colonies, slightly dome-shaped, edges smooth, but pale and transparent; whole colony finely granular. In the agar-agar tubes, originals, the colonies grow in the same manner, *i.e.*, being round and confluent frequently. They are, however, very pale, watery, transparent, flat, and not appearing to be so vigorous. Under low power they are generally found flat, pale white, transparent, granular colonies, having smooth edges.

Glycerine agar-agar stab: Grows on the surface of the stab as minute, whitish, round, thin,

drop-like colonies, very few being confluent until growth becomes quite old, and the whole collection forming a circle around the original puncture. Grows throughout the whole of the needle track, tapering gradually away from the surface. It appears in the stab as a whitish granular collection, with edges finely notched, and which projections appear to be the separate small colonies as seen on the surface. Grows at 37° C.

Agar-agar stab: Same appearance as in glycerine agar-agar.

Gelatine: Smears were made with some of the original material as in the other tubes, but with negative results, and stabs made from cultures failed to grow.

Potato: Grows as an almost imperceptible, white, transparent growth, giving to the surface of the potato a slightly whitish, glazed appearance. Grown at 37° C.

Bouillon: Produces distinct turbidity throughout the whole of the liquid. No surface growth. After some weeks a copious, white, finely granular precipitate is found.

Milk: Alkaline milk becomes strongly acid in a short time. Much fermentation takes place, which is indicated by the bubbles. The milk divides into two parts, an upper clear layer and a lower thick, white coagulum.

Temperature: Grows at 37° C. Has not been tried at higher temperatures, but will not develop at the ordinary temperature of the room.

Produces no color, nor any gas formation.

It is a facultative aerob.

Inoculation experiments: (1) March 25th, 1891. Rabbit inoculated with culture in the skin, after having made small superficial abrasion. Results *nil.*

(2) April 3rd, 1891. Guinea pig inoculated in the same manner. Results *nil.*

(3) May 16th, 1891. Contents of one of the molluscum warts were inoculated into a rabbit's skin. No results.

(4) June 16th, 1891. Inoculation into the skin of the arm of an adult after slight superficial scarification. No results.

(5) Aug. 3rd, 1891. Rabbit inoculated with 2 c.c. of milk culture. Aug. 5th: Much redness around seat of inoculation and very slight swelling. Aug. 8th: Redness and swelling all gone. Results *nil.*

(6) Aug. 29th, 1891. Milk cultures made and fed to a rabbit for six days. No results of any kind obtained.

(7) Sept. 15th, 1891. Guinea pig inoculated with a culture in the back, as on previous occasions, and some of the culture also rubbed into its nose. A small excrescence, about two days after, was found on the nose, but did not have any of the appearances of a molluscum growth. Inoculation in the back was without results.

(8) Dec. 28th, 1891. Rabbit inoculated with a 1 per cent. solution of lactic acid, with some of the micrococci held in suspension. So far, no results.

(9) Jan. 7th, 1892. Rabbit inoculated as before on the back with 2½ c.c. of bouillon culture. The following few days showed slight redness and elevation around the seat of inoculation, which all passed away in a week. Thus far, results *nil.*

(10) Jan. 14th, 1892. Cat inoculated in back.

(11) Jan. 14th, 1892. Guinea pig inoculated in back, and also in a scarified place.

(12) Jan. 27th, 1892. Dog inoculated on its back after making some slight superficial abrasion.

(13) Jan. 30th, 1892. Rabbit inoculated into the anterior chamber of one eye and on the cornea in the other.

Both the dog and the cat died through other causes before any disease could have developed, and thus these two experiments were rendered negative as to results.

The guinea pig inoculated on Jan. 14th, 1892, has not developed anything within a month, and I think that it may be called a negative result.

The inoculation into the anterior chamber of the eye has met with some results. The micrococcus developed rapidly, and produced a circumscribed white patch in the chamber. The conjunctival vessels increased in size, and a general appearance of inflammation of the eye developed. This condition has gradually subsided, as has also the extent of whiteness in the anterior chamber, and now what is to be seen after one month is a small, slightly elevated, opaque white condition in the cornea at the seat of the original puncture. On the corneal abrasion the micrococcus developed for a week,

producing a white-looking appearance, and the eye showing signs of inflammation. Those have subsided, and only the faintest trace of the original seat of inoculation is indicated by a haziness of the cornea at the seat of abrasion.

Lastly, inoculations have been made in the conjunctiva which is reflected over the upper eyelid, and another inoculation has been made into the anterior chamber, both of which are so recent that a report cannot yet be made on the results.

I regret that I have to present to you such a series of negative results, as they seem to make it doubtful if this particular organism is the cause of the disease. But immunity on the part of the animals might explain these failures, for the same micrococcus has been obtained on seven different occasions (as mentioned before), and it seems strange that it should be such a constant feature in this affection, exclusive of all other forms, except the two impurities from the air, of which, also, mention has been made above.

As to the methods of spread of the disease in the way it does, I cannot express any opinion as yet, for it is impossible for me to formulate any theories which seem compatible with the circumstances of its propagation.

Selections.

ON A METHOD BETTER THAN SUSPENSION OF APPLYING A PLASTER JACKET.

BY RICHARD BARWELL, F.R.C.S.,
Consulting Surgeon to Charing-Cross Hospital.

Certain drawbacks and inconveniences are connected with suspension of the patient while applying a plaster-of-Paris jacket; of these may be more particularly selected painful pressure on the jaw and occiput, as well as on the axillary plexus of nerves. The object of suspension is to straighten out the abnormal curve of the spine, so that the jacket when complete may be straighter than the unsupported back of the erect patient, thus preventing intervertebral pressure, and by successive applications correcting, as far as possible, the kyphosis or hump which must result if, such means being omitted, the diseased vertebræ synostose. Children, therefore, whose pelves and lower limbs are small and light, obtain little or none of such benefit; while adults with heavier lower developments may gain more temporary rectification, but can bear the pressure on the points of suspension a commensurately shorter time. Hence the plaster must be of such a quality as will set quickly; no gum or other colloid must be combined with it. The jacket must be completed with great rapidity, and not infrequently the patient must be taken down before hardening is so perfect as to obviate cracking and yielding; for, of course, when suspension ceases there is a tendency to recurrence of the curve, which a hastily applied jacket is too weak to resist. Much experience and practice may up to a certain point minimize these evils, but cannot eliminate them.

I have therefore for some years past ceased to employ suspension in kyphosis, and have straightened, as far as safety will permit, the patient's spine by a modification of my method of rachilysis, which, used differently, has proved successful in lateral curvature; the force—viz., traction by a system of pulleys—being used while the patient is sitting. It is thus carried out in a case of dorsal kyphosis: The patient being clothed in a skin-tight knitted vest, and with the usual parts padded, sits on an ordinary office stool about two feet and a half high, between two opposing walls in which certain hooks, etc., are fixed, as for rachilysis. A three-inch wide piece of webbing, with strong cords at each end, is secured to one of the back legs of the stool, and, passing over the top of the patient's thigh sufficiently tightly, is also secured to the other back leg. A strip of moderately strong unbleached calico, broad according to the size of the patient, crosses the abdomen on and below the umbilicus. This in the position under consideration I will name "counter-traction band." By means of the cords at each end it is fixed at the proper degree of tension behind. A similar strip of calico passes across the back on a level with the point of greatest curve. This is the "traction band." If the projection be very sharp and angular, it is well to make a slit, lengthwise as regards the belt, two or three inches long, so that one of the laps may lie above, the other below the most prominent

vertebra; a cord secured to both ends of this forms the whole into a loop, into which is hitched the hook of the system of pulleys. These two strips of calico would always crumple up and run into ropes as soon as tension comes on them unless prevented, which is easily done by having at hand four slips of common soft wood a little longer than the belts are broad. They are to be placed outside the calico pretty close to the patient's body, one on each side, and into them through the belts, and just at their edges, are thrust surveyor's pins. Lastly, a one inch wide loop of webbing, properly padded, passes across the manubrium sterni under the axilla on each side, and is secured by a cord running through a single pulley at proper tension behind. This I call simply the "lanyard." Now the surgeon begins by making very slight traction by means of the system of pulleys, observing if the tension of his other cords is correct, and places the spine in proper position; if not, it can easily be altered by means of the single pulleys through which the cords run. All being correct he increases the tension, and slips between the laps of both traction and counter-traction bands a board of wood, from ten to twelve inches long, in order to prevent lateral pressure on the thorax and abdomen. He now increases traction up to the desirable point, recollecting that the Astley Cooper system of pulleys, which is that which I use, multiplies his manual force by six. When as much traction as he may deem safe has been attained, he fixes the pulley cord by twisting or knotting it to the loop of the traction belt, thus causing the spine to be immobile during application of the jacket.

As this sitting position and slight restraint are either not at all or very little fatiguing to the patient, the next procedure need not be hurried. Moreover, in order to insure greater hardness and durability to the jacket, some colloid may advantageously be mixed with the water in which the bandages are soaked. The best and most convenient material I find to be liquid glue (Le Page's). About a teaspoonful to the quart of water causes the plaster to set very firm and hard in from twenty minutes to half an hour, according to the warmth of the room. In winding on the bandages those parts of the traction and counter-traction belts which lie close and tight to the patient's body must be included and covered in the turns; those parts which project and stand away from the trunk are left out. By putting on the bandages, not straight, but somewhat obliquely, the chest and abdomen may be covered, with the exception of some little triangular spaces lying under the shelter—the eaves, if I may use such a term—of the projecting parts; these are afterwards dealt with.

When the plaster has become firm, the traction should be slowly relaxed and the calico belts cut away about three inches from the trunk, and any little roughness in the angle where they begin to project removed. Then the triangular interspaces should be wetted and covered with plaster soaked in the gluey water. The calico lappets (the three inches not cut away) are then laid over the newly applied plaster and covered by rubbing into them the same material. If the surgeon has to deal with a dorso-lumbar, or with simply a lumbar kyphosis, the lower belt becomes the traction band, passes to the front, and is attached to the pulleys; the upper belt is then the counter-traction band, passing across the front of the chest as high up as one wishes, and is secured behind. No lanyard is required.

The advantages of this method over suspension may be thus summed up: (1) Hardly any appreciable fatigue to the patient. (2) No painful pressure on any part. (3) The amount of force employed in straightening the spine, instead of depending on such chance condition as the patient's weight, lies entirely within the surgeon's choice. (4) The surgeon may occupy what time he finds necessary in putting on the bandage, and can make a much more perfected one than when hurried. (5) The admixture of glue renders the jacket very durable and strong, capable of upholding a heavy much-curved trunk. (6) Less plaster is needed, therefore the jacket is lighter. (7) Bits and flakes of plaster do not chip away into the clothing and bed. (8) If a jacket removable by cutting down the middle be desired, a much more springy and less friable one, more easily taken off and put on without cracking, can thus be obtained.—*Lancet.*

TREPHINING FOR RELIEF OF INTRACRANIAL PRESSURE.—That in cases in which an intracranial growth is present much relief is at times given by trephining is now well known, but the number of cases as yet reported is too small to allow of its being recognized as a certain, and at the same time a safe, means of treatment. Such treatment, of course, is only applicable to cases in which either the new growth is too large for removal, or its locality cannot be definitely diagnosed. As regards growths in the cerebellum, clinical observation is still at fault. While in some cases it may enable us to say with a fair amount of definiteness that there is a cerebellar tumor, in very few can it be predicted on which side of the cerebellum the growth lies. Every recorded case, therefore, is of extreme importance, as enabling a judgment to be formed of the difficulties and drawbacks which follow such an operation, as well as of the relief experienced and the nature of the cases in which the operation may be expected to have a favorable result. In the last number of the *Journal of Nervous and Mental Diseases* Dr. Knapp, of Boston, reports a case in which diagnosis was very difficult, and in which an operation was undertaken chiefly for the purpose of relieving symptoms resulting from increased intracranial pressure. The patient had been fairly well till October, 1889. He then began to suffer from occasional severe headaches, and at times dimness of sight. He was seen at this time to have double optic neuritis. He lost the sense of smell early in the illness, and became totally blind in August, 1890; but on one occasion, after a severe attack of vomiting, he is said to have had a temporary return of vision. He was seen by Dr. Knapp in October, 1890; and then he had for three weeks complained of failure of hearing in the left ear, had experienced some difficulty in swallowing, and there was a profuse flow of saliva. He had also had on two occasions attacks in which he cried out, fell down, and frothed at the mouth. He likewise had sensations of numbness of the face and hands, but tactile sensibility was fairly good. He suffered from headaches, and was restless and slept badly. There was pain on pressure on a spot in the right temple. Sometimes neither knee-jerk could be obtained; at other times only the right was present. Trephining was advised, and was performed in Jan. 18th, 1891. Bone was removed in the right parietal region, just behind the anterior end of the fissure of Sylvius. There was bulging at the opening; but no tumor was felt or seen even after the opening had been considerably enlarged. After the operation he was more comfortable, although not quite free from headache, and at his own request he returned home on Jan. 28th. He returned a few days later, apparently suffering from left hemiplegia and hemianæsthesia, and he remained in a very somnolent condition for some days. There was oozing of blood from the posterior end of the incision, which had apparently broken down, and later on some brain substance came away. On Feb. 14th he became almost comatose, but a profuse watery discharge from the wound set in, and he began to improve. There was no change in the condition of the hemiplegia, or any sign of returning vision, but his mind was much clearer. The hernia, however, continued to slough, and on March 7th he suddenly became worse, and died on the 9th. At the necropsy there were found signs of meningitis around the trephine opening, and a large tubercular tumor in the left lateral lobe of the cerebellum. Of course, in such a case operation was a forlorn hope, for there was little probability that even vision could have been to any extent restored, and it was also a misfortune that breaking down of the scar should have occurred with the consequent hernia cerebri; but the temporary relief from pain, although brief, is significant.—*Lancet.*

THE USE OF COCAINE IN SURGERY.—At the Islington Medical Society recently, Dr. Woodroffe read a paper on "The Use of Cocaine in Surgery." He wondered how general practitioners got on formerly without it. He specified the following cases in which he had used it with satisfactory results—nasal polypi, adenoma of the naso-pharynx, excision of the tonsils, cystic growths of the scalp, tarsal cysts, scraping out of tubercular abscesses and sinuses in the neck, small false aneurysm in the palm, villous growth in the female urethra, internal hemorrhoids, fistula in ano, tenotomy of anterior and posterior tibial muscles, also of the ligamentous sternal insertion of the sterno-mastoid

in wryneck, fissure in ano, and abscesses of various kinds. Dr. Woodroffe would never use a general anæsthetic for internal piles, save at the direct request of the patient. The expulsive power is saved by cocaine, and is a great advantage to the surgeon. He injects separately into the base of each pile. He has never used more than one grain, generally half that quantity. He had had two cases of poisonous effect, and had come to the conclusion that such a result depends far more on idiosyncrasy than on the quantity of the drug used. In one the quantity injected was half a grain; in the other only a quarter. The first was a woman, the second a girl about fifteen. Such cases have led him to be cautious in using the drug for women, and especially those of a neurotic type. These symptoms appear immediately after injection. He never injects more than half a grain, and waits two or three minutes before repeating the injection in cases where a large dose is required. In this way he has used two grains without bad symptoms; indeed, he had never seen any symptom supervene which did not show itself on administering the first dose. Of the poisonous symptoms, the more evident were pallor of the face, dilatation of the pupils, sense of impending death, with great restlessness, orthopnœa, very rapid cardiac action; the pulse, however, being less compressible, and the second cardiac sound being more marked than in a syncopal attack. These symptoms were followed by perspirations, and in the case of the girl by rambling, incoherent talk for some hours. The treatment adopted was the inhalation of ether and ammonia, with repeated doses of hot brandy and water. Dr. Woodroffe has not found it effective in ear operations or in avulsion of the toe-nail. For the latter he adheres to the use of ether spray. He also praised the use of cocaine (about two grains of the salt in cocoa butter as a flat suppository), coupled with doses of chloral, in the rigid os of primaparæ. It can easily be slipped inside the os and retained there till dissolved.—*Lancet.*

THE DOUBLE CYANIDE OF ZINC AND MERCURY.—Professor Dunstan has already shown that when a solution of zinc sulphate is added to a solution of mercuric potassic cyanide, or when mercuric chloride is added to a solution of zincic potassium cyanide, a white precipitate is formed, which does not consist, as stated, of a double cyanide of zinc and mercury of the formula $ZnHg(CN)_4$. Further experiments, an account of which was given by Prof. Dunstan at the meeting of the Chemical Society on the 17th ult., indicate that this precipitate is in many respects a remarkable substance. The quantity of mercuric cyanide retained is dependent on the amount of water present during precipitation, as well as on the proportion in which the salts interact; the maximum quantity retained is 38.5 per cent. Zinc cyanide, having this percentage of mercuric cyanide attached to it in such a form that it cannot be removed by ordinary washing with cold water, is precipitated when cold saturated solutions of the two salts are mixed in equimolecular proportions. A series of experiments, in which the masses of the interacting salts were varied, proved that a compound of the two cyanides is formed, and suffers decomposition to a greater or less extent, depending on the relative amount of water present. Examination led subsequently to the inference that the composition of the double salt is expressed by the formula $Zn_4Hg(CN)_{10}$. Such a salt contains 40.6 per cent. of mercuric cyanide. It cannot be obtained pure, since it is decomposed by water, and it can only be produced by precipitation of aqueous solutions. All attempts to prepare the double cyanide by methods other than that of precipitation have failed. There was no forthcoming evidence of the existence of any other compound of the two cyanides than that described, nor could any similar compound of zinc cyanide with other metallic cyanides than that of mercury be obtained. It is widely known now that this tetra zincic monomercuridecacyanide has been found to be an admirable surgical antiseptic. Sir Joseph Lister, its introducer, who was present at the meeting, and at whose suggestion the inquiry was undertaken, said that the great value of the salt arose from the circumstance that, while equally effective as an antiseptic, it has none of the irritant qualities of mercuric cyanide, and its slight solubility was an advantage. When mercuric chloride was used it was liable, on the one hand, to be washed away by the discharges of a wound, and, on the other, to accumulate until a solution was formed which was so con-

centrated that it caused great irritation. He was glad that Professor Dunstan had come to the conclusion that it is a definite chemical compound, because he had not been satisfied from its behavior that it could be a simple mixture.—*Lancet.*

PROFESSIONAL MANNERS.—S. Weir Mitchell, M.D., in his interesting sketches entitled "Characteristics," now running in *The Century*, discusses entertainingly the manners of the doctors and their influence on their patients (*Medical Age*). There is no place, he says, where good breeding has so sweet a chance as at the bedside. There are many substitutes, but the sick man is a shrewd detective, and, sooner or later, gets at the true man inside the doctor. There are men who possess cheap manufactured manners, adapted, as they believe, to the wants of the sick-room. According to the man and his temperament do these manners vary, and represent sympathetic cheerfulness or sympathetic gloom. They have their successes and their commercial value, and may be of such skilful make as to deceive for a time even clever women, which is saying a great deal for the manufacturer. Then comes the rarer man who is naturally tender in his contact with the sick, and who is by good fortune full of educated tact. He has the dramatic quality of instinctive sympathy, and, above all, knows how to control it. If he has directness of character, too, although he may make mistakes (as who does not?), he will be, on the whole, the best adviser for the sick, and the completeness of his value will depend upon mental qualities which he may or may not possess in large amount. But, over and above all this, there is some mystery in the way in which certain men refresh the patient with their presence. Every doctor who has this power, and sooner or later he is sure to know he has it, also learns that there are days when he has it not. It is in part a question of his own physical state; at times the virtue has gone out of him.—*Med. Rec.*

THE TREATMENT OF GONORRHŒA.—My treatment of gonorrhœa in all stages has for long been very monotonous. Almost without regard to stage or degree of severity, I prescribe the same remedies. I have long ago laid aside the traditions of my student days, which taught that salines only should be used in the acute stages, and that abortive plans were dangerous. I always use abortive measures, and mostly, I believe, succeed. At any rate, I never encounter ill consequences, and complications are rare. My prescription is a partnership of three different remedies, and it is, I believe, important that they should all be used. First an injection of solution of chloride of zinc, two grains to the ounce; next, sandalwood oil capsules, and, lastly, a purgative night dose with bromide of potassium. The injection is used three or four times a day, the capsules (ten or twenty minims) taken three times a day. The ingredients of the night-dose are three drachms of Epsom salts and half a drachm of bromide of potassium. It is, I believe, the action of the last-named in preventing congestion of the parts which makes the abortive measures safe. Moderate purgation and entire abstinence from stimulants are essential. If the case is very acute and attended by swelling of the corpus spongiosum, I sometimes prescribe tartar emetic or tincture of aconite, but it is very seldom indeed that these are necessary. If the patient be well purged, there is no risk whatever in an abortive treatment from the day that he comes under treatment. The risk of orchitis, prostatitis, cystitis, etc., comes in cases which have been allowed to develop rather than in those treated abortively. I should as soon think of delaying to use local measures in gonorrhœa as I should in purulent ophthalmia.—*Jonathan Hutchinson in Archives of Surgery.*

SIR GEORGE HUMPHRY ON "NIPPING."—Professor Sir George Humphry, F.R.S., in addressing the Cambridge Temperance Association this week, took occasion to protest against the common form of intemperance in drinking, which was short of drunkenness, but which, as it was more general, was more prejudicial, and was doing more damage than actual drunkenness. This was the habit of "nipping"—taking a glass now, a glass then, and a glass often; in the morning (which was worst of all), at the midday meal, in the afternoon, in the evening. Even more than drunkenness, this was terribly

damaging to the system; it made men soddened, and was evinced in a general shakiness of the hand, sometimes of the step, and, above all, of the tongue; in fact, a general shakiness of all the organs. The "nippers" succumbed to slight accidents, slight illness, or slight shocks of any kind. Prick them, and the life, as it were, ran out of them. They said, "My work is hard," and they took the very means which unfitted them for good and prolonged work. By temperance in drink he meant that nothing should be taken whatever under any conditions except at meals, and very little then. Those who could not be absolutely temperate, and content with moderation, should become total abstainers.—*Brit. Med. Jour.*

A CLINICAL LECTURE ON COMMON DISEASES OF THE RECTUM.—C. Heath, in *British Medical Journal*, Dec. 19, 1891, says: All persons who suffer in any way upon the discharge of fæces should have their bowels opened at night, so that the irritation may pass off while they lie in bed. Hard masses of fæces can be assisted on their passage through the sphincter by pressure with the finger just beyond the tip of the coccyx.

In cases of fissure, belladonna ointment or the application of nitrate of silver will cure very slight cases, but the best thing is to over-dilate the sphincter under chloroform, in this way rupturing some of the superficial fibres and getting rid of the spasmodic contraction which causes the pain and prevents healing. The sphincter may also be notched with a bistoury; it is quite unnecessary to cut through the whole sphincter. If an ulcer be present, the bistoury must be carried through it.

Pruritus Ani. Be sure it is due to worms or pediculi. For cases not dependent on local causes, lotions are better than ointments. A 5 per cent. solution of cocaine painted over the anus is very useful.

Mucous Tubercles. Take care that the adjacent parts do not rub one against the other, by keeping a piece of lint covered with white precipitate ointment between the buttocks.

Rhagades. Occasionally there are considerable outgrowths of moist skin about the anus, chiefly in women, commonly called "tabs." They are usually symptomatic of tertiary ulceration of the rectum, with more or less stricture.

Prolapse in children may be a symptom of other diseases. Where it is due to debility, the mother must take a little trouble. If the circular anus be transformed into an elongated slit, by drawing on one side of the anus with the finger during defæcation, the mucous membrane finds much more difficulty in coming down. In addition, cold water enemata and an iron tonic must be employed. When there is difficulty in reduction, it is best to give chloroform, squeeze out the blood with a strip of lint, and return the bowel and lint together; the lint will come away at the next evacuation.

In cases of *procidentia* cure may be effected by means of Paquelin's cautery applied in a series of vertical lines, and also to the margins of the dilated anus in two or three places, so as to contract the parts.

Thrombi of the inferior hemorrhoidal veins should be nicked with a bistoury, and the thrombus turned out.

In the case of *ischio-rectal abscess* the rectum should not be laid open unless there is reason to suspect it has been encroached upon.

In some cases hemorrhage from the bowel is due to a vascular patch of mucous membrane. This may be cured by touching it with a stick dipped in nitric acid or acid nitrate of mercury —*Medical Chronicle.*

THE HEALTH OF SCHOOL CHILDREN.—According to Dr. Francis Warner (*The Lancet*) there is a large group of children, amounting to nearly three per cent. of the children seen, who are so far defective in make as to be usually of low nutrition when seen in school. This fact is more marked in the 36,000 children in day schools; among them twenty-three per cent. of the boys and thirty-eight per cent. of the girls who presented defects in development were noted as of low nutrition. It appears that children are of lower general constitutional power, and tend to an ill-nourished condition under the stress of life and the many causes of mental excitement, which, while they render them sharper mentally, militate against nutrition of the body and its tissues. That the amount of mental stimulus received by children does lower their general nutrition seems to be further indicated as follows: If we divide the

36,000 day scholars into two groups of 10,200, seen in day schools of the upper social class, presumably well-fed children, we find 5.2 per cent. of low nutrition, and among the 25,800 children in poorer day schools, 3.9 per cent. The only explanation to be offered is that the upper-class children have more stress upon them than those of poorer social position.—*Medical Record.*

OBSTETRICAL SCIENCE AND ARCHITECTURE.—In the northwestern part of this city are two maternity hospitals; one, the Sloane, is a model of all that a maternity hospital should be, and is fully equipped with everything that obstetrical science could possibly require. The other, the New York Infant Asylum, is an aged, wretched, ill-ventilated, badly-plumbed wooden building, reeking with sewer-gas, and threatening at any time to fall into the street. It has not even a pair of obstetrical forceps which can be called its own. Yet, in the past few years there have been delivered in each hospital 1,000 consecutive cases of midwifery, with only, in each series, three deaths. The results have been obtained, of course, only by great watchfulness and careful antisepsis. But they show that architecture and elaborate appliances are not absolutely essential to successful work, and that the man is greater than his environment.—*N. Y. Medical Record.*

THE DANGER OF COUNTER-IRRITATION IN LOCALIZED TUBERCULOSIS.—According to Parrachia Anacleto, counter-irritation in localized tuberculosis is attended with great danger. Miliary tuberculosis spreads so rapidly from one organ to another by way of the veins and lymphatics that any irritation set up at the seat of the primary mischief cannot fail to increase the tendency of the disease to become general. Four cases which have recently come under his notice show this in a remarkable degree. Tuberculosis progresses slowly, but it allows of no violent remedies, and, he thinks, until some method of treatment more successful than either the injection of tuberculin, or cantharidate of potash, or the application of blisters has been discovered, the danger of causing general infection by their adoption will still remain.—*Lancet.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, MAY 16, 1892.

THE THERAPEUTICS OF DAMIANA.

It may be allowed to preface this short account of the therapeutic action of this, as yet, little used drug with a statement of some other items of information regarding it. Synonyms: Turnera diffusa, T. aphrodisiaca. It is a plant of the order turneraceæ; habitat, tropical America, from Mexico to Brazil; part used, the leaves. Botanical characteristics are uninteresting; suffice it to say that it is a plant of the wild mint kind, with strong, disagreeable, "sagey" odor and taste. It has been used by the natives, particularly of Mexico, as a stimulant and restorative, in much the same way as cocoa leaves were, further south in Peru and Bolivia, after prolonged exertion, or to prevent further fatigue. Particularly in Western Mexico, according to the evidence of Spanish missionaries so early as 1699, was a decoction of the leaves, with sugar as a flavoring agent, in high repute, not only for the purposes mentioned, but as a specific for sexual impotence in both sexes. In 1874 the drug was introduced to the profession in America by Dr. John J. Caldwell, of Baltimore, and extensive experiments since made by skilful practitioners in a great variety of cases would seem to have quite established the value of the drug as a stimulant and tonic of the genito-urinary system in particular, and of the functions, at any rate, of the cerebellum and spinal centres in general. A summing up of the results of the observations of nearly forty practitioners in various parts of the United States, with reports of cases, appearing at various times, mostly in the columns of the *Therapeutic Gazette*, may be interesting. First of all,

a case of poisoning by damiana displayed tetanic convulsions and other symptoms identical with those of strychnine, and was finally cured by the treatment usual in strychnine poisoning. Exhibited in therapeutic doses, the difference between the two seems to be mainly the slower action of damiana, results accruing usually not within a fortnight to any marked extent, but being very noticeable after that time in most cases. The action of the active principle seems to be mainly upon the spinal and medullary centres, and to be not so much stimulant because present in the lymph pabulum offered to the ganglion-cells, as alterative, inducing exhausted or irritable cells to assimilate the nutriment presented them. The theory is suggested by the slower onset and more tonic effect of the action of the drug. It is supported by further clinical effects. The influence of the drug on the bowels is the causation of the mushy stools, one or two a day, which result from heightened peristalsis, due in its turn to better action of the spinal centres and the sympathetic system. Damiana alone has corrected most effectively the habitual constipation of neurotic subjects who were the victims of sexual perversion.

The mint or buchu-like qualities of the leaf show themselves in the increased diuresis attending its use; this effect is probably partly local upon the renal epithelium, and partly vascular, as its sedative and tonic effect upon the heart and vascular system is in some cases of functional disturbance equal to that of cactus grandiflorus. The local effect of the active principle as found in the urine has frequently been very valuable in cases of irritability of bladder and urethra, such as often accompanies prostatorrhœa or spermatorrhœa. The majority of successful reported cases have been males, suffering from various forms of impotence or insufficiency in the act of sexual congress, not accompanied by any extensive organic lesion, but due to excessive indulgence, onanism, or masturbation. Several cases are reported of impotence following on spinal shock, as that sustained by a fall or blow, which were very effectively remedied. Many cases had resisted all ordinary treatment, both local, with bougies and stimulating applications in the prostatic and other regions, and general, with phosphorus, strychnine, cantharides, iron, hygienic and dietetic measures; but in a fortnight or a month's time showed gratifying improvement on damiana. The flabby and atrophied condition of the testicle often seen, or the milder condition of abnormal tenderness, especially at the back of the testicle and in the prostate, as the result of sexual excess, promptly disappeared. Even the organic effects of gonorrhœal inflammation of the prostate, vesiculæ seminales, and testicle have in some cases shown a degree of improvement that could be attributed only to the use of damiana, as rest and regular treatment of such cases had failed to do them the desired good. As a sedative in acute cases it has not been proven to have much value; but as a nerve tonic, with an especial effect on the genito-urinary apparatus, it is a decided success. One authority on its use remarks that "the idea that the agent is a direct stimulant of erotic desires is without the slightest basis. In several cases of abnormal sexual appetite, it has acted as a calmative, relieving the trouble by imparting tone and vigor to the sexual apparatus."

In some cases of paraplegia and hemiplegia, and of atony persisting after long illness, the tonic effects of the remedy upon the spinal centres have been very marked, quite equal to those of strychnine and ergot. It would seem that here again we have an instance, even allowing for the first flourish of trumpets with which a new remedy is generally heralded in, of a drug that might well be in much more common use, and another instance in which the American School of Eclectics, by introducing new remedies, does a service to the profession at large.

The standard preparations, apart from various elixirs and combinations with phosphorus, strychnine, etc., and pill and tablet combinations, made by firms such as Wyeth, Parke, Davis & Co., are a fluid extract, ½ dr.; a solid extract, 5-15 gr.; powdered extract, 5-15 gr. A tincture is also made. Of the fluid extract the dose may be pushed up to a tablespoonful three times a day, best given in milk, or with equal parts of pure glycerine, syrup of Tolu, or some other fruit syrup.

THE DOMINION MILITARY MEDICAL ASSOCIATION.

The meeting for the organization of this association was held in Toronto on Monday, May 9th, and was a pronounced success. The attendance was large, including many well-known military surgeons from a distance. A constitution was drawn up, and will be submitted to the members at their first annual meeting, June 2nd. It is expected that a special general meeting will be held in Ottawa in September next, during the meeting of the Dominion Medical Association.

The following officers were elected:

Hon. President: Surgeon-General Bergin.

President: Surgeon Strange, I.S.C., Toronto.

Vice-Presidents: For Ontario, Surgeon V. H. Moore, 41st Battalion Brockville Rifles; for Quebec, Surgeon-Major F. W. Campbell, I.S.C., Montreal; for New Brunswick, Surgeon Stephen Smith, Woodstock Field Battery; for Nova Scotia, Surgeon Curry, 66th Princess Louise Fusiliers, Halifax, N. S.; for Prince Edward Island, Surgeon J. Warburton, 82 Battalion, Charlottetown, P.E.I.; for Manitoba, Surgeon Codd, Canadian Mounted Rifles, Fort Osborne, Man.; for British Columbia, Surgeon Matthews, Garrison Artillery.

Hon. Secretary: Surgeon G. S. Ryerson, Royal Grenadiers, Toronto.

Hon. Treasurer: Surgeon Halliday, 57th Battalion, Peterboro.

Executive Committee: Drs. Leslie, Paull, Hillary, Osborne, Griffin, Lynch, Grasett, McCrimmon, Mitchell, Holmes, Harris, and Elliott.

Business Committee: Drs. Stewart, Rennie, Nattress, King, and Henderson.

THE PROPOSED MEDICAL FACULTY OF QUEEN'S UNIVERSITY.

Queen's University has no teaching Medical Faculty, although many have a vague idea that the medical school in Kingston, properly known as the Royal College of Physicians and Surgeons, is a part of the University. Rumors have been in the air for some time to the effect that an "organic union" of the medical college with the University would shortly take place. Negotiations, with that end in view, are now in progress; and it is quite likely that the Royal College of Physicians and Surgeons will soon go out of existence, and the members of the staff will be placed on the Medical Faculty of the University. We have heard, in fact, that the greater portion of this work has already been accomplished.

The friends of higher medical education will, as a rule, endorse the new order of things. Queen's is a very worthy institution, and her prospects were never so bright as they are to-day. Her strength and solidity, together with her facilities in certain departments, will greatly assist in improving the methods of medical teaching in Kingston. The old Royal College has done good work in the past. Her alumni list contains the names of many who have attained high distinction as medical practitioners in Canada and various other countries.

MEDICAL ALUMNI SOCIETY OF THE UNIVERSITY OF TORONTO.

The annual meeting of this society was held in the School of Practical Science on Friday, May 6th, at the close of the special Medical Convocation of the University. On the same evening the annual dinner was held in Webb's restaurant. There were about sixty in attendance—not so many as there were last year—and the proceedings passed off very pleasantly. It is well understood that these Alumni dinners are quite informal in character, there being no official guests, set speeches, nor toasts. The desire is to bring the graduates together, promote good fellowship, and give a pleasant evening to all present. Dr. Machell, the retiring president, acted as chairman for a time; but, being called away early, Dr. Richardson took his place. One of the features of the evening was the magnificent reception of the toast to the distinguished vice-president and chairman, who has, for so many years, been well known as one of the best anatomists and most successful teachers that can be found in the world. We are glad to know that the society is in a fairly flourishing condition; but we hope that in the future there will be a larger attendance at both the ordinary meetings and the dinners.

Meeting of Medical Societies.

PATHOLOGICAL SOCIETY OF TORONTO.

March 26th, 1892.

The society met in the Biological Department, the vice-president, Dr. A. McPhedran, in the chair.

MOLLUSCUM CONTAGIOSUM.

Dr. W. R. Shaw read the following paper and presented slides and cultures of the micro-organism he had found in the specimens examined by him.

(See page 224 in this issue of THE CANADIAN PRACTITIONER.)

Dr. A. B. Macallum said that this investigation might settle whether molluscum is contagious or not. He thought the molluscum growth was a structure not very far removed from a neoplasm. If it is of microbic origin, might not also epithelioma, carcinoma, sarcoma, etc., be due to bacteria, as Scheurlein held? The molluscum corpuscle is wholly a degenerative product, not a psorosperm at all, and is never found outside of the epithelial cell. Many held the opinion that Neisser's view, *i.e.*, that these bodies are coccidia, explained the contagiousness of molluscum; but if Dr. Shaw is correct, the contagiousness is also easily explained.

Dr. Greig asked if Osler did not say that he had found molluscum corpuscles lying between the epithelial cells.

Dr. A. B. Macallum explained that by the term "molluscum corpuscle" he meant only the body contained in the epithelial cell, the so-called psorosperm; while Osler and others called the whole cell, with its contained body, the molluscum corpuscle, and these of course would be found lying between the unaltered epithelial cells.

Dr. Fotheringham remarked that Fagge called this disease a cutaneous adenoma.

CANCRUM ORIS.

Dr. W. R. Shaw reported that in a case submitted to him by Dr. J. M. MacCallum, the blood contained no streptococci, but only a large increase of leucocytes.

ANGEIOMA OF THE SKIN.

Dr. Primrose presented a specimen with microscopical section, and made the following remarks:

He had removed the tumor from the face of a boy of 15 years of age. It appeared first of all as a pimple, and in two months had grown to the size found at the time of operation. It was regularly cylindrical in shape, ¼ inch in diameter, and projected from the skin surface ⅝ of an inch; dark purple in color; it bled very freely on the slightest irritation. The skin around the tumor was perfectly normal in appearance, and the growth appeared to have no deep connections. Its position was over the margin of the lower jaw, on the left side, immediately behind the line of the facial artery.

It was freely removed, an elliptical portion of skin and the subcutaneous tissue being removed with it; the cutting being done through tissue apparently quite healthy.

On section, the most striking feature is the large number of dilated capillary blood vessels; between these there is a considerable amount of lymphoid tissue, and numbers of large epithelioid cells are irregularly massed together; in the deeper parts of the growth, these groups of cells are surrounded by fibrous tissue resembling, to some extent, the condition formed in an alveolar sarcoma; then, again, groups of cells are seen similar to those of the malpighian layer of the epidermis, not lying deeply in the tumor; these probably are comparable to the cells-nests found in a simple papilloma when the section passes obliquely through the papillæ, and are not to be considered as carcinomatous. The characters of the tumor, as examined under the microscope, would lead one to classify it as an angeioma possessing some of the characteristics of a papilloma, on the one hand, and a sarcoma, on the other. The clinical history of rapid growth would rather point to its being sarcomatous in character.

Dr. McPhedran presented the following specimens:

DIFFUSE CARCINOMA OF THE STOMACH.

affecting its walls throughout, both orifices being healthy. In many parts the walls were greatly thickened—one inch—in others only slightly thickened. There was scarcely a trace of mucous membrane, except at the orifices. The stomach was dilated to about twice the normal size, and adherent to the liver, spleen, pancreas, and

descending portion of duodenum. There were no secondary deposits in any of these organs, but the retroperitoneal glands behind the stomach were affected. The thickening and adhesions at the pyloric end of the greater curvature formed a tumor about 3 inches by 2 inches in size that was easily palpated during life; it was somewhat movable and situated just below the normal situation of the pylorus. The absence of signs of pyloric obstruction showed that it could not be due to thickening of that orifice.

The specimen was from a man, æt. 65, who had showed signs of failing health, with pain in the epigastrium and dyspepsia for over two years. There was no vomiting, nor could dilatation of the stomach be made out; the moderate dilatation being obscured by the thickening of its walls. The contents of the stomach had on several occasions been removed after "trial breakfasts," and always gave negative results to tests for free HCl by methyl violet.

Dr. Oldright asked in what proportion of cases vomiting was present.

Dr. Fotheringham said the absence of vomiting might be explained by want of physiological activity of the muscular coat.

Dr. Greig said that congestion of the mucous membrane might account for the absence of acid even in an otherwise healthy organ.

Dr. McPhedran said vomiting was present in nearly all cases where the disease affected the orifices of the stomach, especially the pylorus; but it was often absent when the disease was in the fundus. In regard to the absence of hydrochloric acid, he said extreme congestion of any gland leads to arrest of secretion.

PERFORATION OF THE DUODENUM.

Dr. McPhedran, for Dr. C. E. Flatt, also showed a specimen of perforating ulcer of the stomach at the pyloric ring from a man æt. 39, who had always enjoyed good health. The perforation occurred 26 hours before death. The surrounding tissues appeared healthy; the ulcer was therefore, probably, of very recent origin. The man was a hotel-keeper, but of temperate habits. He had had no indications of disease of the stomach.

CARD SPECIMENS.

By Dr. McPhedran:

(1) Heart, showing hypertrophy of the right ventricle, with lesions of the tricuspid, aortic, and mitral valves.

(2) Cirrhotic kidney.

(3) Heart weighing 24 ounces, hypertrophied and dilated, without much valvular lesion.

(4) Brain from paralysis agitans, showing calcareous vessels.

By Dr. Scadding: Ovary, showing cystic degeneration.

By Dr. Cameron: Multilocular ovarian cyst.

The society then adjourned.

Correspondence.

Editor of THE CANADIAN PRACTITIONER:

SIR,—Amid the crossfiring and raising of side issues that characterize the wordy war now raging round the devoted Medical Council of Ontario, one may be excused, perhaps, for being a little befogged, and may, perhaps, attempt to make an orderly statement of theory and fact in the premises without laying himself open to the charge of *cacoethes scribendi*. First and foremost arises the abstract question to be considered, without any concrete application for the present: Is it reasonable, or is it not, to expect of any body of men that, having provided themselves with corporate powers of existence, and an executive for the rendering effective of their organization, they should contribute equally, and at a fixed rate agreed upon, to the expenses of management? Or, again, is it fair that, after chance given by means of fair and open election of their own representatives, any individuals of the corporate body in question should decline to contribute their share towards the expenses of their organization, and either leave the burden on the shoulders of the willing few, or suffer the organization they originated to fall to pieces from lack of funds? Will the gentlemen of the Medical Defence Association (*sic*) make a concrete application of these abstract questions to their own case, and see how they must appear to the public, whose attention they have been seeking to attract through the daily press, but to whom, in so far as they give the matter any notice, they must appear to be engaged in an attempt to repudiate their just obligations, an attempt sought to be made respectable by dint of the numbers engaged in it? The facts, so far as I have been able to

gather them, seem to be that the Council levied a fee upon its members, paltry in amount, but necessary for legitimate expenses, which the great majority of the members, through mere supineness and distance from the scene of action, failed to remit; that then the Council sought and obtained legislation allowing more effective methods of recovery of these fees, and that then, for the first time, it was brought home to the minds of the delinquent members that the corporation of which they are members is in earnest. What is the immediate result? Not the manful "whacking up" of what had been neglected (through mere inadvertence though they were regularly enough notified), but an attempt to show that the fee is unnecessary, that it is due either to greed or to mismanagement on the part of the Council, and that the means of collection adopted are unnecessarily drastic. As regards the first of these results, or, indeed, the first two, they are due mainly to gross and inexcusable ignorance among the members of the college of the proceedings of their own Council, and of the precedents and customs of all similar corporations. Dr. McKay, in his address to the Local House, printed in your issue of April 16th, gives a list of precedents sufficient for any who are open to conviction—the Surveyors' Association, the Solicitors' Act, the Pharmacy Act, the Architects' Act, etc. I am not, I think, too severe in speaking of "gross and inexcusable ignorance" among those who have somewhat hysterically raised the tyranny cry and taken to attitudinizing before the public. I had rather attribute their misstatements to that than to deliberate desire to bamboozle by misrepresentation of facts. The Council's "land speculation" (*sic*), for instance, has been much insisted on, and blamed, indeed, for the late more rigorous collection of fees. No member of the profession in the province will say that the Council should have been still content with a name, and no local habitation but a rented church. The lack of facilities for examination and the premium put upon dishonesty thereby were enough of themselves, to say nothing of the need of decent offices for the treasurer and other officials. The Council wisely erected a building which would, in a few years, be a source of income, and have already suggested the likelihood of complete remission of the petty annual fee as soon as that point is reached. Whether or not the means of collection adopted are too drastic is a matter of opinion. The fact that, in 1889, it cost $316 to collect $376, while, in 1891, $4726 was collected at the cost of postage for the notices, would seem to argue in favor of the new method. It seems to me that those who complain of undue severity in collection can be logical only in saying that the $2 is more than the services done them by the Council are worth. Thoughtlessness alone could allow such a statement. The deluge that would follow were the old order of things existing before 1868 returned to is plainly seen from a letter which appeared lately in *The Mail* from a "physio-medicalist" of this city, in which the survival of the fittest was plainly taught, and every individual was held to be entitled to try to heal the ailments of any one willing to trust him.

I cannot close without expressing regret that the Medical Defence Association has so plainly shown the main and real motive of their action. I am not imputing motives when I say that it is chiefly jealousy of city practitioners and the schools that is at the bottom of it. Dr. Sangster's letter in *The Daily Mail*, dated April 20th, amply proves the existence of this spirit, as also the statements circulated about the library, said to be kept in the Medical Council building at the expense of the Council for the benefit of members residing in the city only, though the Library Association is really a separate organization and a tenant of the Council's. The same spirit was made clearly to appear in the conference held between the Cabinet and the Council during the last session, when, in answer to the Attorney-General, Mr. Meacham, the promoter in the House of the views held by the gentlemen of the Medical Defence Association, stated that a compromise suitable to his party would be that no assault should be made upon the representation of the educational institutions in the Council if the $2 fee were absolutely remitted. Truly, an undignified position to assume; the fair and manifest inference being that the howl raised against the alleged ascendency of the schools was genuine to the extent of a mean $2 per annum, but no more. It is to be fervently hoped that more interest in the affairs of their own organi-

zation may be aroused among all the practitioners of the province by the present agitation, and that by the time the House of Assembly meets again better information and soberer reflection may have tempered the hasty action and revoked the unwise conclusions of some who, in a tantrum over a trifle, declare their willingness to destroy the most perfect medical legislation that any country in the world enjoys.

JUVENIS.

Book Reviews.

A Manual of Operative Surgery. By Frederick Treves, F.R.C.S., Surgeon to and Lecturer on Anatomy at the London Hospital. In two octavo volumes containing 1550 pages, with 422 illustrations, mostly original. Per set, cloth, $9; leather, $11. Philadelphia: Lea Brothers & Co., 1892.

Mr. Frederick Treves is widely and favorably known to the medical profession in Canada; he is considered to be one of the foremost of English surgeons, and it is therefore with confidence that we look for a valuable work in his manual of operative surgery which has just been published. The reader will not be disappointed in Mr. Treves' work, which is undoubtedly of a high standard. It is evident that the author, who is a man of excellent judgment and wide experience, has devoted his best talent to the compilation of a work which furnishes the most complete and reliable guide we possess concerning the technique of the various operations in surgery.

The subject is dealt with in two large handsome volumes, well and copiously illustrated. In the first volume we have discussed subjects of general interest and of great practical value. "The condition of the patient as it affects the result of an operation" forms the title of the first chapter, and we find that a thorough examination of the patient is insisted upon before submitting an individual to a surgical operation. Thus the examination of the urine—so often neglected—is held rightly to be of vital importance. An operation upon the subject of Bright's disease or of surgical kidney is held to be "a desperate matter," and, as Mr. Treves states, "a patient may look fairly healthy, may appear well nourished, may be temperate and leading a most regular life, and the operation may be but a trifling one, yet the complication of albuminuria renders the surgical procedure one of the most serious and the most hazardous." This statement we endorse heartily, as we do also the author's statements with regard to lung disease, heart disease, diabetes, and constitutional affections, such as syphilis and tuberculosis. Mr. Treves has not entered into any discussion concerning antiseptic precautions in the operating room. He evidently accepts as a fact now beyond the possibility of denial that, to ensure success in the practice of surgery, we must adhere to the principles enunciated by Lister. The methods advocated in procuring asepticity of wounds are not elaborate, but are adequate. We are struck throughout the work with the clear, accurate, and precise way in which the author deals with the anatomical facts necessary to be borne in mind in performing the various operations in surgery. The minute and yet concise manner in which the anatomy is dealt with will prove of great usefulness, more particularly to the general practitioners who may be only an occasional operator and who has not the advantages of familiarizing himself with anatomical details in the dead subject. Most of the anatomical points are well brought out by excellent diagrams, depicting the various structures in a wound and their relations. In speaking of ligation and of the lingual artery, we are inclined to think that the author is a little wide of the mark when he states that ligature of the artery in the first part (before it passes under the hyoglossus muscle) is but *rarely* performed. Mr. Treves advocates strongly the ligation of the artery in the second part, under the hyoglossus muscle, and minimizes the objection (usually raised thereto) that the dorsalis linguæ branch is, as a rule, not controlled by such procedure; he holds that no difficulty arises from leaving the dorsalis linguæ unsecured.

We find a most interesting historical account of each operation; this in itself gives us a valuable record of facts culled from a great variety of sources, which must have entailed much patient labor on the part of the author. Operations of modern development are described and certain procedures are minutely detailed in a manner not obtainable in any

other work of the kind; thus the chapter on "Operations on Nerves" is thoroughly up to date: we find here the methods of operating for removal of the superior maxillary nerve, Meckel's ganglion, and the still more delicate operation for the removal of the Gasserian ganglion. There is a valuable chapter on operations for deformities of the lips and the plastic surgery of the soft and hard palate, with a most instructive section on the principles of plastic surgery in general. We cannot help being somewhat disappointed in the brief manner in which the subject of operations on the head and spine is dismissed. There have been such great advances made in the surgery of the brain and spinal cord of recent date, by such men as Horsley and Keen, that one would have wished for a more complete treatment of the subject. One method of procedure alone is suggested for opening the spinal canal, that by median incision over the spinous processes. It is very questionable if this method is as advantageous as an incision a little to one side of the middle line, in which the muscular and ligamentous connections of the spinous processes are less interfered with, and in which it is necessary to separate the soft parts from one side only of the spinous processes. The whole subject dealt with in this section is far from being as complete as one would have wished. The radical cure of hernia is discussed most fully; the various procedures which have proved successful are well described, the article being illustrated with various wood cuts. Mr. Treves' monograph on intestinal obstruction, published a few years ago, proved the author's ability to deal ably with the subject of intestinal surgery; we are therefore not surprised to find the subject dealt with in an exhaustive manner. This branch of surgery, largely of modern development, has opened up a large field for the surgeon. The article on intestinal anastomosis, gastro-enterostomy, and like operations, is very fully dealt with, and the various procedures described in detail. Dr. Senn is largely quoted in this section.

The work, as a whole, is most complete, and we congratulate the author on having performed his work in such an eminently satisfactory manner.

Miscellaneous.

RESULTS OF EXAMINATIONS IN MEDICINE AND DENTISTRY IN UNIVERSITY OF TORONTO.

Starr Gold Medal—T. H. Middlebro.

Starr Silver Medal—H. A. Bruce.

Faculty Medals: Gold—H. A. Bruce.

Silver—1, T. H. Middlebro; 2, R. H. Gowland; 3, J. A. E. Brown.

Third Year Scholarships—1, J. A. Harvie; 2, T. E. South.

Second Year Scholarships—1, W. Crain; 2, H. H. Johnston.

First Year Scholarships—1, T. W. G. McKay; 2, J. T. Pratt.

Final Examinations—D. A. Beattie, R. R. Bensley, G. H. Bowles, J. Dargavel, J. Farrow, Miss M. J. Foster, H. Massie, H. McCormick, H. A. McCullough, H. MacLaren, L. C. Sinclair, A. Skippen, J. R. Smith, H. Toeppen, H. A. Wardell.

To take supplemental examinations in subjects of the final examinations:

Medicine—Sinclair, Skippen.

Surgical Anatomy — McCormick, Sinclair, Wardell.

Obstetrics—McCormick, Sinclair.

Gynæcology—Sinclair, Wardell.

Therapeutics—Sinclair, Wardell.

Pathology—MacLaren, Sinclair, Skippen, Wardell.

Hygiene—Sinclair, Wardell.

Medical Psychology—Wardell.

A. E. Awde passed in Clinical Medicine, completing his final examination.

Fourth Examination—H. A. Bruce, T. H. Middlebro, H. J. Way, E. G. Smith, F. H. Heming, P. McG. Brown, J. N. E. Brown, L. N. McKechnie, J. McAsh, A. A. B. Williams, J. A. Wilson, S. H. McCoy, J. J. Harper, J. F. Ross, J. H. G. Youell, W. H. Tye, G. L. McBride, R. H. Gowland, G. W. Gould, A. W. Heaslip, A. Montgomery, R. H. Green, F. K. Armstrong, H. Gear, B. Kilburn, C. C. Richardson, R. F. Forrest, W. T. Wilson, J. A. Cowper, L. H. Campbell, D. A. Clark, J. A. Hershey, W. A. Campell, J. H. Closson, J. A. C. Evans, F. A. Rosebrugh, F. H. Hagerman, F. H. Moss, W. Crawford.

Third Examination—A. Crichton, J. E. Lehmann, J. N. Harvie, J. H. McGarry, T. E. South, D. Marr, W. F. B. Wakefield, C. J. Taylor, E. E. Harvey, T. B. Futcher, W. Elliott, P. D. Tyerman, J. B. Peters, A. H. Nichol, H. W. Hill, H. F. McKendrick, J. J. Williams, J. R. McKenzie, S. G. Story, D. McAlpine, C. W. Thompson, H. D. Pease, J. H. Austin, F. W. Pirritte, W. F. Park.

To take supplemental examinations:

Medicine—Smuck.

Clinical Medicine—Smuck, Taylor.

Clinical Surgery—Park, Smuck, Taylor.

Surgical Anatomy—Smuck, Story.

Pathology—McKendrick, Smuck, Taylor.

Obstetrics—Marr.

Second Examination—H. A. Johnston, J. Crawford, J. H. Bull, R. B. Wells, W. E. Crain, J. D. Curtis, W. J. McCollum, C. E. Smyth, J. A. Lawson, F. Coleman, J. F. McKee, H. A. Cuthbertson, R. M. Lipsey, J. R. Mencke, L. O. Fiset, W. B. Boyd, B. Campbell, W. S. Northcott, R. J. Hastings, E. B. Fisher, D. A. McClenahan, J. A. White, N. McL. Harris, G. B. Gray, T. C. Hodgson, H. N. Rutledge, J. Park, W. L. Coulthard, H. Guelph, T. McCrae, A. B. Greenwood, A. Galloway, T. H. Whitelaw, A. E. Gardner, K. C. McIlwraith, A. H. F. Tegart, W. Douglas, F. W. Stockton, F. C. Wallace, J. Reeves, D. J. Armour, G. M. Ferris, W. C. C. Freeman, J. P. Sinclair, J. W. Ford, E. D. Graham, W. A. Hackett, J. W. Smith.

To take supplemental examinations:

Anatomy—Agnew, Jones, McDermid, Reazin, G. N. Rutledge, H. H. Sinclair, Wickett.

Physiology—Coulthard, Guelph.

Materia Medica—Agnew, Coulthard, McDermid, Northcott, Reazin, G. N. Rutledge, Wickett.

Chemistry—Coulthard, Guelph, G. N. Rutledge.

Histology—Guelph, Wickett.

First Examination—J. R. Lancaster, T. W. G. McKay, M. Currie, M. Zumstien, A. K. Merritt, G. S. Young, G. A. Elliott, A. J. Hunter, J. I. Pratt, W. Thom, M. O. Klotz, W. D. Keith, J. Sheehan, W. J. Chapman, A. Gibson, J. A. McNiven, C. A. Orr, M. McPhail, T. G. Allen, E. A. White, F. C. Delahey, W. T. McArthur, W. M. Parker, J. G. Gaven, R. T. Noble, L. Lawrason, E. K. Richardson, W. R. Alway, H. W. Miller, C. D. Chapin, E. T. Kellam, A. R. McLachlan, A. Downing, S. E. Fleming, T. McCrae, W. B. McKechnie, I. G. Smith, J. K. McQuarrie, J. G. Sloane, Miss J. I. Dow, N. G. Amyot, A. S. Elliott, G. W. Hall, E. B. Fisher, M. B. Smith, D. W. McPherson, A. E. Leitch, D. J. Armour, A. S. Langrill, J. A. Rolls, G. D. R. Simpson, H. Paine, A. A. Small, W. Stephep, S. B. Bean, R. A. Downey, W. Hird, G. E. Millichamp, A. E. Northwood, H. McL. Paterson, A. Thomson, J. Thorne.

To take supplemental examinations:

Physiology—A. S. Elliott, Fleming.

Chemistry—Amyot, A. S. Elliott, McQuarrie.

Biology—Fleming, McQuarrie, J. Thorne.

Candidates for D. D. S.—S. Anderson, J. A. Black, J. H. Fell, H. F. Kinsman, F. B. Ross, D. C. Smith, G. A. Walters, S. A. Akroyd, E. A. Billings, T. C. Trigger.

To take supplemental examination in Operative Dentistry before being admitted to degree Anatomy—Walters.

OFFICERS OF THE MEDICAL ALUMNI SOCIETY OF THE UNIVERSITY OF TORONTO.—The following were, at the recent meeting, elected as officers for the ensuing year: President, Dr. J. A. Mullen, Hamilton; vice-presidents, Dr. A. Robinson, Unionville; Dr. Howitt, Guelph; Dr. Duncan, Chatham; Dr. J. Ferguson, Toronto; Dr. Clarke, Kingston; treasurer, Dr. B. L. Riordan; secretary, Dr. Harley Smith. council, Drs. A. H. Ellis, A. B. Macallum, W. Oldright, H. E. Buchan, J. D. Thorburn, F. Cane, B. Spencer, H. T. Machell, A. McPhedran, G. Acheson.

TO DEODORIZE IODOFORM.—The following combination is allowed by the Addendum of the *Netherland Pharmacopœia* to deodorize iodoform: Carbolic acid, one part; oil of peppermint, two parts; iodoform, one hundred and ninety-seven parts.

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Original Communications.

DIET OF CHILDREN FROM TIME OF WEANING TILL END OF SECOND OR THIRD YEAR.*

BY H. T. MACHELL, M.D.,

Lecturer on Obstetrics in Woman's Medical College; Surgeon to St. John's Hospital for Women.

Mr. President and Members: The proper food for babies just after weaning, and young children up to two or three years of age, is not a subject about which the general practitioner ever gives much thought. Indeed, he is not often consulted in regard to the subject. More frequently the grandmother or some elderly nurse suggests that the child should be fed on this and that or the other thing, and it is given. Probably more frequently still the child gets a little of everything at the table, neither father nor mother thinking that little children should not have the same diet as themselves. Frequently the parent's food is coarse and badly cooked, and when that is the case the baby must necessarily suffer accordingly. When one considers that the greater proportion of ailments among young children is due to digestive disturbances, and by far the largest number of these cases to improper feeding, I feel that I need no apology for bringing before this society a subject which may, at first thought, appear to be insignificant.

The time of weaning cannot be the same for all infants. The majority of authorities agree that it should take place between twelve and eighteen months. It should never occur before one year except for some grave reason, and not then if that time happens to come during the latter part of the spring or at any time during the summer. We know that digestion is carried on with much more difficulty during the hot weather—that the system is then less able to resist the entrance of certain micro-organisms into the alimentary canal and their multiplication there. An effort should always be made to have the weaning take place a sufficiently long time before the hot weather, to enable the baby to get accustomed to the new food, whatever it may be. To allow a baby to be weaned deliberately during the summer months is almost criminal; it means that the baby has to run the gamut of all the intestinal diseases, and that, if it does survive, it will have received such a shock that it will take months, or possibly years to recover properly. The second summer is always a serious one for children. The laity have come to recognize this. The mother, if she be a wise one, will have accustomed her baby to take food out of a spoon or cup or bottle before weaning entirely; or she may have fed the baby during the day, reserving the breast-milk for the night time. By doing this the baby will have got accustomed to taking its food out of a spoon or cup, and thus one of the earliest lessons in feeding will have been learned.

Having weaned her baby at about a year old, what is the mother to feed him on? If, for any

*A paper read before Toronto Medical Society, May 20, 1892.

serious reason, the weaning has occurred during the summer months, the baby should be confined to a milk diet (by milk I mean cow's milk as ordinarily obtained in cities). If he thrive, it is advisable to continue with it alone till the eighteenth month at least. Many children will take nothing else than milk up to two or three years, and, provided enough be taken, no fear of their nutrition need be entertained. If a child thrive on milk, he is never to be forced to take additional food merely because a certain age has been reached; let the healthy appetite be the guide.

You have all seen "one cow's milk" advertised, and must have noticed it painted in large letters on the sides of the milk wagons going about the city. Do not allow your patients to be deluded with the idea that they are getting "one cow's milk"—even if they are paying an additional price for it. They are not likely to do so if the dealer has more than one cow. Some years ago I recollect a patient on Augusta Avenue telling me, at one of my visits, that they had found a milkman who was good enough to let them have "one cow's milk," at an extra price of course, and to it they attributed the improvement in the child's condition. Almost immediately after leaving the house I noticed on the sidewalk, three or four doors up from this house, a milkman emptying milk from his large can into two or three small ones, one of which he handed in at the door of the house I had just left. This was their "one cow's milk," and probably a fair sample of the article usually sold as such. The mixed milk of a good herd is to be preferred, in any way, to that of a single animal. It is less likely to be affected by peculiarities of feeding, and less liable to variations from alterations in health or different stages of lactation.

Pregnancy seems to be given as the chief reason why most women wean their baby during the hot weather, if questioned on the subject. Seldom or never have I seen any serious result to a nursing baby from the mother becoming pregnant; and at any time during the summer months I should always strongly urge a mother to continue nursing her babe till the middle of September, that is, till the cool weather comes on. In giving expression to this opinion, I know I am running contrary to the teaching and the practice of many. Laziness or unwillingness of some mothers to nurse their babies, and the desire to turn them over to the sole care of a nurse, is, many a time, the cause of babies being weaned long before they should be. If a child does not thrive on milk alone, some of the farinaceous articles of diet may be added, with the understanding that milk should form the basis of the diet. Barley water is certainly the most frequently used, and probably the best one, though, if there be a tendency to constipation, oatmeal water or thin gruel at one or two meals a day will be preferable. Either of these substances should be boiled at least four or five hours (Eustace Smith), to insure thorough cracking of the starch granules, and then strained. They may be added to milk in the proportion of one to three or four, or even one to two.

J. Lewis Smith, at the meeting of the American Pediatric Society, 1889, advised for this purpose barley flour, which, in a double boiler, has been subject to the heat of boiling water for seven days. This flour is so largely used that it has been placed in some of the drug stores in New York for sale. The flour ball recommended by Eustace Smith over twenty years ago in his work on "Wasting Diseases of Children" was a step in this same direction. Arrowroot, from the large amount of starch, should not be used. Stale bread has been suggested also; and I have observed on many occasions the avidity with which children will take this. One method of preparing it is by taking a slice or two of the centre of the loaf, pouring boiling water on it, allowing it to stand soaking for half an hour, pouring off the water, adding fresh boiling water, and then boiling briskly for another half hour. If the water be now strained off it forms a stiff jelly. A portion of this may be added to milk or milk and cream. Some children will take this without any sugar if salt be added. Beef tea or beef broth, chicken broth, mutton broth, etc., I scarcely ever advise, though they are recommended by almost all the authorities as foods. It should be recollected in advising these foods that mutton causes constipation, and that veal and beef are frequently the cause of diarrhœa (Adams). According to Eustace Smith, the farinaceous particles retard the curdling of milk by getting between the particles of the coagulum. The casein is thus separated,

not in several large clots, but in minute portions, which are more easily attacked by the digestive fluids. In other words, they act as a mechanical diluent.

Rotch, in the *Boston Med. and Surg. Jour.*, 1889, took up this very subject, and from a series of experiments came to the conclusion that the views concerning the various diluents used for this purpose are not only theoretical, but incorrect. He started out with the fact that the total amount of nitrogenous matter in human milk is from 1 to 2 per cent., and in cow's milk about 4 per cent. A portion of this is coagulable, and a part of this coagulable portion consists of a chemical combination called casein. The non-coagulable portion in human milk is greater than in cow's milk. The reverse of this is true of the nitrogenous portions of cow's milk. This difference in coagulable quality has induced observers to attempt to break up the larger curd of cow's milk with diluents and attenuants; but he believes that since these nitrogenous matters are two to four times as great in cow's milk as in human milk, it is more practical to dilute these matters until the dilution corresponds to that found in human milk, when the coagulum will be found to correspond to that of human milk and will not need to be broken up. It is claimed that the curd of human milk is small, soft, and friable, and that of cow's milk is large, tough, and tenacious; but Rotch found that where the percentage of albuminoids in human milk reaches that in cow's milk, the curd resembles that of cow's milk. In support of this, he instances the case of a wet nurse whose milk on plain food contained 2.59 per cent. of albuminoids. After a three weeks diet of greater amount and richer quality, with less exercise, the percentage reached 4.61 per cent., and the babe vomited thick curds. On a return to plainer food and skimmed milk, the percentage fell to 2.9 per cent. and the babe ceased vomiting. He gave in detail ten experiments with cow's milk, twenty-four hours old, each treated differently by boiling, sterilizing, lime water, barley water, etc., and then digesting artificially; in nine, curds were found in different sizes, the size decreasing as the proportion of diluents was increased, until in the tenth, in which the proportion was one part milk and five parts plain water, no curd was found—in this respect resembling woman's milk tested at the same time. These results show that a diluent is of service, not so much for any particular chemical quality or ingredient it may contain, as for its power of diluting the milk.

In the "Cyclopedia of Diseases of Children," this same experimenter gives a formula for making a preparation which has the same chemical constituents as human milk. It is as follows:

Milk	℥ii.
Cream	℥iii.
Water	℥x.
Milk Sugar . . .	2 measures.

Place in a flask in a steamer and steam for twenty minutes; then remove the flask from the steamer, and, when slightly cool, add

Limewater ℥i.

Place on ice and give proper amount at proper times. The measures mentioned above are of tin, and hold ℥iii.$\frac{3}{8}$

Rotch claims that this is an improvement on the Meigs' mixture which many have used for several years. Meigs' mixture is:

Milk . . .	℥ii.
Cream . . .	℥iv.
Limewater . .	℥iv.
Sugar water . .	℥vi.

The sugar water is of the strength of ℥i 7¾ to a pint of water. The limewater here is ¼ of the whole amount, and distinctly alkaline to the taste; while in Rotch's preparation it is $\frac{1}{16}$, and not at all suggestive of alkalinity.

I have prescribed the former preparation very frequently during the last two years for children under, as well as those over a year, suffering from malnutrition, and found it to be nearly always well digested.

Arthur V. Meigs, at the meeting of the American Pediatric Society held in Washington in 1889, suggested an improvement in the preparation of the mixture named after his father. He thought that the cream, as ordinarily obtained in cities, is kept so long that it is very liable to become sour; and therefore directs now that the mixture be prepared as follows: One quart of ordinary milk is placed in a high pitcher and allowed to stand in a cool place for three hours; then one pint is slowly poured off, care being taken that the pitcher is not agitated, the object being to obtain the upper layer of

fluid, rich in fat, and leave the lower, comparatively poorer, portion behind. When a child is to be fed there are taken of this:

Weak cream	3	tablespoonfuls.
Lime water	2	"
Sugar water	3	"

Sterilization not suggested.

This makes only four ounces, and if the child requires eight ounces at once double the quantities must be mixed. This is simply warmed and is ready for use. It is more economical and less liable to ferment than the mixture known to the profession as the Meigs' mixture. In place of the sugar water, I advise my patients to use boiled water and half a teaspoonful of sugar of milk. I also advise them to put it in the steamer and steam for from 20 to 30 minutes. This will keep for a day or two or longer in the hottest weather.

Whether the milk is prepared after this formula or not, it is always advisable to use only the upper half or third—the "top milk," as it is called "across the lines."

Within the last few weeks I have been giving this modified Meigs' mixture to a child a year old, and who was weaned four months ago. His capabilities for digestion were no greater than those of a good, healthy baby at six months. At once the mixture appeared to be digested, and now he is thriving on it better than on anything since his birth, though a short time before I had tried Rotch's preparation, and had to abandon it after a few days. Within twenty-four hours on Rotch's mixture the breath became sour; then followed vomiting of curds and the presence of curds in the stools.

Peptonized milk was supposed to completely revolutionize infants and children's feeding when first suggested by Fairchild Bros., only a few years ago. I advised it frequently for some time, and on many an occasion it appeared to work like a charm, especially in cases of gastro-intestinal catarrh. Latterly it has disappointed me, and during the last year I have not advised it more than two or three times.

Dr. Adams, of Washington, speaking of a couple of cases of gastro-intestinal catarrh in the Children's Hospital of that city not doing as well as his private patients, investigated and found that the resident physician was experimenting with peptonized and pancreatinized milk. He found that as soon as this was stopped and properly prepared cow's milk was substituted, the cases quickly recovered.

Condensed milk is frequently recommended by physicians and largely used by the laity. It contains a large proportion of sugar, often forms fat quickly, and thus makes large children. Children fed on condensed milk, though fat, are lethargic and flabby; although larger, are far from being strong; have little power to resist disease; often cut their teeth late and are likely to drift to rickets (Louis Starr).

Another writer—Baruch, in the *Dietetic Gazette*, July, 1888—writes in a similar strain. He says that children fed on a solution of condensed milk will take more food, absorb more water into the tissues, and produce less blood and muscle. Hence they cannot resist disease, and while they appear to be nourished they are anæmic, lymphatic, and they readily become scrofulous if the tendency exists.

Sometimes milk in every form, and however carefully prepared, ferments soon after being swallowed, and excites vomiting and causes great flatulence or distress, while it affords little nourishment. With these cases the best plan is to withhold milk entirely for some time and try some other food.

Whey is a very good substitute, and frequently tides a child over a critical period. I think of one now who lived ten days on it alone, improving daily. Or barley water may be used. Or keeping a child for some hours on whiskey and water, or whiskey and water may be alternated with the barley water, or a teaspoonful or two of the juice of raw beef will often be retained when everything in the shape of milk is rejected.

Such foods are only to be used temporarily, until the tendency to fermentation within the alimentary canal ceases; then milk may be gradually and cautiously resumed.

In regard to patent foods Rotch says: "They must necessarily be unreliable; their claims are not supported by intelligent and unprejudiced investigation." Further, he thinks "it is high time for us, as physicians, to appreciate exactly how inefficient in themselves, and how misleading in their claims, are these artificial foods, and also in what a false position, as protectors of and advisers to the public, *we* are placed in doing anything but ignoring them." He is convinced that the merit of their, at times,

apparent success does not belong to them, but to other accompanying circumstances.

Adams (of Washington) also "desires to enter a protest against the use of the various 'infants food' as substitutes for or aids to cow's milk. Mothers are attracted to them by the warnings posted in street cars, and the pictures of plump, rosy babies distributed by the druggists. Analyses by competent and honest chemists—not paid by the manufacturers—have shown them to be rich in the ingredients they are guaranteed not to contain, and to be deficient in those which are lauded as being present in larger proportion than in any other food."

Having arrived at the conclusion that cow's milk, modified, is the most suitable article of diet for babies and young children after weaning, we must look on another side of the question which is probably nearly as important; that is, the quantity and frequency of feeding.

Many mistakes are made in regard to these points. Emmet Holt says: "It has been my experience and observation that artificially-fed children are often fed two or three times too much and also too frequently, especially at night. There is no doubt that indigestion and diarrhœa are due in many cases quite as much to the quantity and frequency of feeding as to quality of the food given." Keating, of Philadelphia, also says: "The great mistake has been overfeeding."

So crude an idea have the majority of mothers in regard to quantity that I have been in the habit of late years, in the case of children who are very ill, of putting my directions in writing, giving the kind of food, the amount, and the frequency of feeding.

If a child from 12 to 18 months is well and his appetite demands additional food to the milk, he may have stale bread broken up in his milk, stale well-cooked bread and butter, a crust, stale bread moistened with red-dish gravey from beef or mutton, a sandwich of scraped beef, almost raw, or part of a soft-boiled egg with stale bread-crumbs in it. Any of these may be given once or twice a day except the last-named.

There is no well-recognized rule of feeding applicable to all cases. Each one must be regulated by its own particular requirements, and that line of feeding carried out which proves best suited to it. If a certain diet appears to agree with a child, as little variation as possible should be made in it. The child should be fed five or six times a day at nearly the same hours.

I do not like diet tables; as a rule, they are too suggestive of hospital life; but the following formulated by Louis Starr, of Philadelphia, seems a good one:

First meal, 6 a.m.: Cup of milk, with cream-biscuit or a slice of buttered bread.

Second meal, 8 a.m.: Stale bread broken and soaked in a tumblerful of rich milk.

Third meal, 12 a.m.: A slice of buttered bread with about half a pint of weak beef tea, or mutton, or chicken broth.

Fourth meal, 4 p.m.: Tumblerful of milk, with crackers or buttered bread.

Fifth meal, 8 p.m.: A tumblerful of milk, with bread and crackers.

By the time the child has reached the age of about two years, he is usually able to digest oatmeal or cracked-wheat, and these he may have with his 8 o'clock meal, and with the mid-day meal he may be allowed a piece of rare roast beef to suck, some mashed potatoes moistened with the dish gravy, and a little rice or farina. The other meals had better vary as little as possible from the diet table just given.

I try as well as possible to keep these little ones on an almost wholly milk diet till the dreaded "second summer" is over, and longer still if the child's digestion is not very good.

Up to this age it is probably better that the child should have its meals at a separate table rather than with the other members of the family. If it does not see food, it is not so likely to want it and get something it should not have.

Betweeen two and three years of age, a child is often more difficult to manage than a younger one, for it can walk about and help itself to all sorts of things. Its increased growth and size demand a greater variety of food than the younger ones. Its powers of mastication, its increased flow of saliva, its improved digestion, and increased assimilation call for this. It should be fed four times a day, with a drink of milk between meals if hungry. If well, it may be allowed ripe fruits in moderation, provided care be taken to prevent it swallowing seeds

and rinds. A popular fruit is the banana; but Dr. Adams' experience has been such that he considers it more productive of eclampsia than any other fruit, and consequently he cannot recommend it. (Cyclopædia of Diseases of Children.)

An important point, often neglected, is the matter of drink. Every young infant requires water several times a day, and the demand increases with the age of the child. The water should be pure, and not too cold. In hot weather especially, they should have it frequently.

It is scarcely necessary to say that the major portion of this paper refers to children who are suffering from improper feeding, and not so much the well ones, whose capability for digesting all manner of things is often a marvel.

CAUSES AND TREATMENT OF CARCINOMA.

BY L. TESKEY, M.D., M.R.C.S. ENG.,
Professor Pathology, Trinity Medical College.

There are two theories as to the nature of the cause of carcinoma which appear necessary to discuss, viz.: (1) That it is an abnormal growth of epithelium, probably resulting from irritations of various kinds. (2) That it is due to the influence of a special microbe, foreign to the body, and introduced in various ways.

Doubtless the immediate effect of irritation on living cells tends towards their death and destruction rather than growth, yet reproduction and growth follow as a sequel and are the secondary result of the irritant; but in that growth in the disease in question physiological laws are disobeyed, and pathological conditions take their place. To establish a theory of this kind we must recognize the independence of the life and growth of the cells of our body—that when supplied with nourishment, normally, they grow definitely and to perform a special function; pathologically, they grow indefinitely and without function, so long as nourishment is provided. While thus looking upon the cells of our body as being a kind of independent organism, any foreign microbe would be unnecessary to produce the phenomena of the growth of cancer.

But little observation is necessary to establish the causative influence of prolonged irritation, for it is the prolonged disturbance that is most effective, as is abundantly illustrated in epithelioma of the lip of the habitual smoker. In fact, so constantly do we find this disease located in such parts of the body as are most exposed to irritation—for example, the scrotum of the chimney sweep, the glands and prepuce of the genital organs of the male, the breast of the female, prominent warts and moles, the tips of the ears, the mouth, and the rectum—we seem justified in looking upon the relation as being that of cause and effect. I do not find any good reason for believing that this disease is hereditary, and, so far as my personal observation goes, it is the exception and not the rule to find the disease having previously existed in the family history; and where such existence is found, it could as reasonably be explained as a coincidence.

In connection with the subject of irritation, I beg to call special attention to the probable manifestation of the disease primarily at some distance from the point irritated, as illustrated by the following cases:

(1) Scirrhus in axilla from irritation of the thumb nail.

(2) Carcinoma of lymphatics of submaxillary region, and small abrasion in sublingual region.

Age appears to be a predisposing cause, and that there may be other predisposing causes is rendered probable, in view of multiple epithelioma sometimes existing.

As to the second theory, the evidence relating to the existence of a foreign germ negatives such conclusion.

One of the most valuable contributions to our knowledge on that subject will be found in the *British Medical Journal* of March 14, by Shattuck and Ballance.

I take it that not only do their experiments go to show that it is not probable that any organism such as a microbe exists, but they give presumptive evidence to the other theory advanced, inasmuch as the results are just what would be expected in accordance with it. For example, while inoculations were attempted between animals of different kinds, the inoculated material liquefied and was absorbed; like as when the blood of one animal is injected into

another, the corpuscles soon disappear; while, on the other hand, inoculations carried on with animals of the same kind were, in a degree, successful, as shown by the experiments of Dr. Hanan.

I therefore find myself believing, not as Dr. Shattock and Dr. Rollance, that a micro-organism foreign to the body would be found, but rather more probable that no such organism exists, and that the disease is due to abnormal growth of cells brought about probably by prolonged irritation, and that such irritation may be at some distance from the primary manifestations of the disease.

AS TO TREATMENT OF CANCER.

The first question which would naturally arise would be, Does nature make any effort to arrest this disease, and is it ever successful? In other words, do we ever have spontaneous cure? I think the indications are in the affirmative. How else could we account for that form of cancer called the atrophic form, where the nests appear to cease to progress and cicatricial tissues take their place?

Also we have the assertion that the complication of erysipelas may be curative. On that subject, I have no observations.

It would be difficult to account for the varied rapidity of similar forms of the disease in similar situations in different individuals without believing that there is varied resisting power.

HISTORY OF CASE.

Female patient of middle age eight years ago, having a tumor of the breast, sought medical aid, and was told by some of our leading physicians that she was suffering from cancer which required immediate operation, that she would not survive more than from six months to a year without operation, and that with operation they could not safely say that she would survive two years. About a year ago I saw the patient with her physician, who had her in charge for six years, she having declined operation. When I saw the case the right breast presented a large tumor, nearly as large as one's closed fist, of stony hardness, irregular, with retraction of nipple, and an ulcerated surface fully ½ to ¾ in. deep and of the area of a penny. The ulcerated surface was red in color and discharging but little.

I look upon this case as one in which the efforts of nature are prevailing against the disease.

And now, gentlemen, in view of the case which I have brought before you, and in view of the disease in question being at first a purely local one, what about the more active treatments of excision? In conclusion, I beg to submit, first of all, with a view to prevention, that an abrasion fissure or ulcer resisting all treatment and showing no tendency to heal under proper treatment for a period of two months should be excised.

(2) That excision is curative, but curative only while the disease is local and the operation carried wide of the parts affected, best done when the disease attacks the extremities.

(3) That after the lymphatics are affected, speaking generally, the value of operating is doubtful, and generally hastens, rather than delays, the fatal result.

This last conclusion I have reached believing that the excessive hemorrhage attending such operations lessens the resisting power and favors more rapid progress of the disease afterwards.

Selections.

LITHOTRITY IN CHILDREN.

BY F. A. SOUTHAM, M.B. OXON., F.R.C.S.,
Surgeon to the Manchester Royal Infirmary and to the Clinical Hospital for Women and Children.

In *The Lancet* of Feb. 15th, 1890, I published a case of lithotrity at a single sitting in a boy aged three years and a half, and since that date I have performed the same operation in five additional cases, brief particulars of which are here given:

Case.	Age.	Size of stone.	Structure.	Weight.	Duration of operation.	Result.
	Years.	Inches.		Grs.	Min.	
1	3½	Oval: ½	Ur.acid.	15	25	Up on 3rd day, discharged on 7th.
2	10	½×¾	"	45	70	Up on 5th day, discharged on 21st.
3	4	½×½	"	14	30	Up on 4th day, discharged on 7th.
4	5	1¼×1	"	125	60	Up on 3rd day, discharged on 8th.
5	5	Oval: ⅜	"	13	20	Up on 2nd day, discharged on 8th.
6	3	" ⅞	"	32	45	Up on 4th day, discharged on 7th.

In each instance the result has been extreme-

ly satisfactory, confirming in every respect the Indian experiences of Surgeon-Majors Keegan and Freyer, who were the first to advocate and practise this method of treating stone in male children. In performing lithotrity in young subjects, one is surprised to find how extremely tolerant the bladder is of prolonged instrumentation, the essentials for success being, in the words of Surgeon-Major Keegan, "great gentleness and a light hand." With two or three ounces of fluid (boric lotion) in the bladder, and the pelvis and thighs of the patient slightly raised, so that the stone may fall back upon its posterior wall, the operation is a very simple one; in fact, much easier of performance than in an adult, the absence of any pouch or depression behind the prostate facilitating the seizure of the calculus and the removal of the fragments after it has been crushed.

Before deciding upon lithotrity in a child, it is, I think, advisable to know the exact size of the stone. This can be best estimated by measuring it with a small lithotrite when the child is sounded; more satisfactorily of course if the examination is made under anæsthesia. As cystitis is usually present to a greater or less extent, the bladder should at the same time—viz., while the patient is under the influence of the anæsthetic—be thoroughly washed out with boric lotion. For a few days previously to the operation the irrigation should be repeated each morning, an anæsthetic not being necessary. By this means the condition of the urine is improved, the cystitis is relieved, and the urethra becomes accustomed to the passage of instruments. If a soft India rubber catheter is used for the purpose, it causes scarcely any pain, and is usually well tolerated by the patient. In cases where the urine is very offensive—as happened in Case 2—small doses of boric acid may also be given internally. In none of my patients has it been found necessary to continue the irrigation after the operation, the removal of the calculus having been followed by a subsidence of the symptoms of cystitis. I am of opinion that by the employment of what we may term "urinary antiseptics"—drugs, such as boric acid, salol, etc., by means of which we are able to sterilize foul or toxic urine, and at the same time relieve inflammation of the bladder walls—the risks and after-complications of lithotrity in children, as well as in adults, are greatly minimized. As the operation is often somewhat prolonged, it is very important to guard against exposure to cold, and also to dimish as far as possible the effects of shock. With this object I always take care that the body and limbs of the child are wrapped in flannel bandages, and during the operation the patient lies upon a large, flat, hot-water tin, covered over with a blanket, which fits on the operating table. If hot fomentations are applied to the lower part of the abdomen and perineum after the operation, the child will usually pass urine in the course of a few hours without any straining or difficulty, and, beyond a slight smarting, with very little pain, usually much less than previously to its performance. In only one of my cases has there been any rise of temperature, and the following morning the patients have all been practically convalescent. It is, however, advisable to keep them in bed till the third or fourth day, when they may sit up in the ward, and at the end of a week they are usually quite fit to leave the hospital. In each instance the operation was performed with Weiss's Nos. 5 and 7 children's lithotrites, and the fragments removed with Nos. 6 or 8 evacuating tubes. In Case 4, as the stone was too large to be crushed with No. 7 lithotrite, it was first broken up with one of Weiss's small lithotrites for adults (about No. 9 size), and the operation was completed with Nos. 5 and 7 lithotrites. This case illustrates the fact that a calculus of considerable size—viz., over an inch in diameter—may be safely crushed in a young child. I believe that in the future lithotrity will quite supersede lateral lithotomy in children, and also that if a stone is too large to be crushed it will be an indication for the selection of the suprapubic operation.—*Lancet.*

THE FUNCTIONAL DISORDERS OF THE VOCAL MECHANISM.

Abstract of Paper

BY JOHN WYLLIE, M.D., F.R.C.P. EDIN.,

Physician to the Royal Infirmary, Edinburgh.

Two mechanisms in exact co-ordination with each other are concerned in the production of speech. 1. That of the larynx, which is the producer of the vocal element. 2. The oral element, by which the sounds of the larynx are

modified, and by which new sounds produced within the mouth itself are added to the vocal tones of the larynx. If the ordination becomes imperfect, the speech is at once interrupted and labored. That the defect of speech in the common variety of stammering is due to deluged action of the laryngeal mechanism in attacking the first syllable of words is an old proposition, which is maintained to the present day by the best observers. The truth of this is shown by many familiar proofs. Thus, the stammerer rarely, if ever, has the slightest difficulty in song. In like manner, they rarely have trouble if they intone or read poetry. All this shows that when a primary demand for voice is made, as in song, or other forms of rhythmical speech, sufficient energy is supplied to the laryngeal mechanism to cause the difficulty to disappear.

Intelligent use of the voice is one of the essential elements of speech, and this can only be fully attained by a knowledge of individual letter-sounds. Such a knowledge will enable him to readily throw the voice into the vowel or consonant that contains voice, and to touch off lightly any consonant that does not contain voice, bringing the voice out immediately in the vowel or vocalized consonant that succeeds it. For this purpose the author has prepared an an alphabet, so arranged that the voiced elements are separated distinctly from the voiceless. Such alphabets are not new. They have been constructed by Arnott, Pitman, in his phonetic system, Max Muller, Bristow, and others.

In studying the phenoma of stammering, three general causes are final:

(*a*) Faults in the local mechanism, by which term is meant not only the larynx, but also the lungs and muscles of respiration.

(1) Want of promptitude in the supply of voice during the pronunciation of the initial syllable.

(2) The voice may not only lag, but may also be feeble in quantity, because the speaker does not fill the lungs with air, but attempts to speak from a half empty chest.

(3) The voice sometimes breaks from its natural pitch during a struggle in speech and assumes a much higher key.

(4) There may be drawback phonation, the result of an attempt to speak during an inspirating effort.

(*b*) Faults in the oral mechanism, caused by surcharge of energy.

(1) The lagging of the voice and misdirection of energy cause the stammerer to surcharge his oral mechanism with energy so that he sticks at his explosives and prolongs his fricatives and nasal resonants.

(2) From the nerve-centres of oral articulation thus surcharged, an overflow in some cases occurs, producing spasmodic movements in the face and sometimes in other parts of the body. The most common of these are spasmodic twitchings of the lips and cheeks, working of the jaw, and forcible winking of the eyes.

(*c*) Overflow into the upper glottis. In a few cases, the energy imperfectly supplied to the vocal mechanism flows excessively, not only into the organs of articulation, but also into the upper or non-vocal parts of the larynx. This part has the false cords for its inferior margin, which is unclosed during phonation. If, however, the false cords close over the true and shut off the passage of air by their valvular action, the voice is at once interrupted and the patient, with open mouth and congested face, silently struggles without being able to emit the imprisoned air.

In beginning treatment it is best to first explain clearly to the patient the nature of his defect, and to show him that it is not the mouth, but the larynx that is at fault. He must therefore attend only to the voice and speak in a full, resonant, but natural tone. He should practise reading aloud, at first poetry, then prose. If he has an ear for music, he should cultivate the voice in song. He should be taught the physiological alphabet for which complete instructions are given by the author. He must be taught to fill the chest with air, but if he grasps the great principle of speaking with voice he does this instinctively. Extreme cases requires the instruction of a specialist, but, as a rule, persevering and intelligent practice will enable the patient to effect a cure for himself.

The prognosis depends largely upon the intelligence of the patient. Age is an important factor, being favorable between twelve and sixteen. Cases with severe spasmodic complications are unsatisfactory.—*Edinburgh Medical Journal.—Archives of Pediatrics.*

ABDOMINAL TUMORS FROM RETENTION.—In the examination of unusual conditions of abdominal enlargement it is difficult to make sufficient allowance for what is possible in the way of passive distension of the viscera. The urinary bladder may fill the belly, and even the gall-bladder may go far towards the same result. The ordinary cause of what is called "pot-belly" is accumulation of fæces in the intestines. In the rabbit, and perhaps in most herbivora, it is, strange as may seem the statement, usually the cæcal appendix which undergoes distension, whilst in the human subject the cæcum and colon is the tract involved. I am induced to ask attention to this matter on the present occasion from having recently read the following abstract of a case published by an Australian surgeon. It proves that a knowledge of what is possible is of great importance in order to the avoidance of most grave errors in practice:

"A remarkable case of fæcal accumulation is reported by Dr. R. Worrall in the *Australasian Medical Gazette*. The patient was a girl, aged thirteen, of a cachectic appearance, who had a rapidly growing abdominal tumor. Aperients were given, and for several days a large quantity of very offensive fæcal matter was discharged, but without any noticeable effect in reducing the volume of the tumor. As the child was evidently sinking, it was determined to make an exploratory laparotomy, the supposition being that the tumour was malignant. On opening the abdomen, however, the swelling was found to be an enormous accumulation of fæces in the cæcum and colon. The operation seemed to have had a stimulating effect upon the bowels, which acted almost continuously for a few days. In six days the tumor had entirely disappeared and the child made a good recovery, her life having probably been saved by an error in diagnosis."

Dr. Worrall's narrative brings to my mind a precisely similar case which came under my own observation many years ago. I was consulted by my friend Dr. Mundie, formerly of Dalston, in the case of a young girl who had "an abdominal tumor." The child was about twelve years old, pale and emaciated, and her abdomen was as large relatively to her body as that of the last month of pregnancy. She was confined to her bed. I found to my astonishment that in pressing the fingers firmly upon the swelling an indentation was left, as if it were so much dough. Further examination convinced both Dr. Mundie and myself that this was due to distension, by soft fæces, of an enormously dilated colon. The rectum was found to be full of the same. Suitable measures were adopted—first the spoon, afterwards enemata, aperients, and nux vomica—and the child was soon relieved of the accumulation and restored to fair health.

It must never be forgotten that in these cases there is often no obvious retention. In the one which I have just narrated there was, if I remember correctly, reputed incontinence of fæces and not constipation. This is constantly the fact in instances of over-distension of the urinary bladder, and it misleads often both the patient and the practitioner. In a very early period of my career I once tapped a woman's abdomen with a small exploring trocar and drew off urine. Fortunately no harm followed and I learnt a lesson. On another occasion, much more recently, I was taken into the country by an accomplished gynecologist to assist in the diagnosis of a large tumor which had puzzled him. The result of our examination was that we passed a catheter and took the tumor quite away. The lady had been voiding urine freely, and this had caused the mistake.

In at least one case on record, the abdomen has been laid open for ovariotomy, and the tumor then found to be a distended gall-bladder.

In the male subject I have known many blunders as to the diagnosis of a distended urinary bladder. Six or eight years ago an elderly gentleman travelled up from Devonshire to consult me with what he had been told was an incurable tumor in his abdomen. It was nothing but his bladder, but it presented the unusual feature of being not in the least tense, and, although it reached the navel, it felt loose, and could be easily pushed from side to side. Catheters were used, and, after the not unusual attack of cystitis as a result, recovery followed. This patient is, I believe, at the present time in the enjoyment of good health. It is a curious fact that in this, as in most other cases of painless vesical distension, no cause of obstruction could be discovered. They appear to be examples of simple atony.

During the last year I have attended another case exactly like that just narrated. An old gentleman, who averred that he had never in his life had the least difficulty in passing his water, had a very large abdominal tumor. A medical consultation took place, and a grave diagnosis was given. A week or two later I was consulted. I found the tumor quite lax, and easily swayed from side to side, but as it fluctuated and was in the middle line I could not doubt that it was the bladder. The catheter proved the correctness of this surmise.

I may venture to offer the following categorical memoranda for the avoidance of error in the recognition of abdominal retention-tumors:

(1) The distension, although enormous, is usually quite painless.

(2) The retension is never absolute, but only residual. There is always overflow.

(3) The patient never assists the surgeon, but rather misleads him, insisting that there is free relief of bowels and bladder.—*Jonathan Hutchinson in Archives of Surgery.*

ON THE USE OF THE ECRASEUR FOR TONGUE OPERATIONS.—In advocating the use of the ecraseur-wire (cold) for removal of the tongue or of parts of it, I am influenced solely by the belief that it is a much safer instrument than knife or scissors. It is quite true that by carefully tying each artery as cut, a dexterous surgeon, with good assistants, may get through an excision of the tongue with but very little loss of blood. Even in the best hands, however, exceptional cases will every now and then occur, and it is these which spoil the statistics. It is not merely the loss of blood which is dangerous, but there is always risk that some of it may find its way into the air passages. The loss of blood is, however, to the old and feeble persons, who are often the subjects of these operations, not a matter to be lightly thought of. That ecraseur operations are safe, that no risk whatever attaches to the sloughy surface which the wound is apt to assume a few days afterwards, I can testify from very considerable experience. For many years I have never used any other instrument, and, with the exception of one at the London Hospital, I have never lost a single patient. The division of the tongue is always accomplished without any bleeding, but after it is complete I always seek the lingual arteries and try to provoke them to bleed in order to tie them. This is done by way of precaution, for since I abjured the cautery wire I have had no trouble with secondary hemorrhage. The bleeding of the linguals referred to is always very feeble, just sufficient to reveal the artery and no more. It never involves any risk of blood passing back into the throat. I now always use a cold iron wire and cut very slowly, taking at least half an hour to the procedure. It is not a showy operation, but I repeat that I believe it far safer than any other. As regards the place of election, I always now content myself with being well behind the disease, and by no means regard it as essential to take the whole tongue. If the disease is on one side, the line of section crosses the tongue obliquely. There is no inconvenience as regards subsequent speech from these oblique divisions, and I very decidedly prefer the stump left by them to that resulting from the removal of one longitudinal half of the organ. One great advantage which, in my opinion, attaches to the ecraseur is that operations by its aid require patience only in order to success. They may be performed by any one at any time, and the operator is but little dependent upon his assistants. This is an advantage not to be despised when we remember that the circumstances under which cases of cancer of the tongue first come under surgical observation are often such as do not permit of immediate recourse to a hospital or to a surgeon of special experience in such cases. Were operations of this kind less formidable in the general estimation of the profession, we may feel sure that they would often be performed at much earlier periods; and this, after all, is the grand condition as regards permanent results.

Postcript.—Since the above was written, I have received the ninth volume of the "Transactions of the Royal Academy of Medicine of Ireland," which contains an important paper on "Excision of the Tongue for Cancer." The paper is by Mr. Croly, and warmly advocates ligature of the lingual arteries as a preliminary to the operation, thus bearing testimony to the fact that, despite modern methods, the risk of bleeding is, to him, still a matter of considerable anxiety. In the course of the discussion, Mr. Lestaigne stated that "he had seen several cases

in the hands of excellent surgeons where very severe hemorrhage had occurred." These admissions quite accord with facts which come to my own knowledge; for although some of my friends who use scissors speak very lightly of bleeding, I still hear not infrequently of cases in which it proved severe, and in all probability much prejudiced the patient's prospects.—*Jonathan Hutchinson in Archives of Surgery.*

CASE OF CHOREA TREATED BY CHLORAL HYDRATE.—The following is a case which recently occurred in the Bristol General Hospital, where I was physicians' assistant at that time, and which, as it may be of interest, I am allowed to publish by the kind permission of Dr. J. Mitchell Clarke:

A. Y——, a strong, well-nourished girl of fourteen years of age, engaged as a pupil teacher in a national school, was admitted on Aug. 24th for rheumatism accompanied with chorea. It was her first attack, was mainly right sided, and presented no unusual feature; it was attributed to excessive mental work. She improved with rest and treatment—viz., first salicylate of soda, and subsequently Fowler's solution—up till Sept. 3rd, when, under the agitation caused by the conduct of a patient in a neighboring bed, she fell into a state of furious excitement. Her movements became incessant and maniacal in character, so violent that she was constantly being thrown out of bed, and had to be tied down with boards let in at the sides. She seemed conscious all the while and to understand what was said; she obviously, for instance, tried to answer questions, but could not frame the words. She was at once isolated, and at night chloral, at first combined with bromide of potassium, was given in fifteen doses of each, the arsenic being continued during the day. On the night of Sept. 4th I gave her thirty grains of each without producing any sleep, and increased it to forty on the night of the fifth with equally little effect. On Sept. 6th, as she was becoming completely worn out, and had had no sleep since Sept. 3rd, while it was obvious that if the movements were not in some way checked she must, sooner or later, die, I administered chloroform. She was kept under for several hours, but when she came round was as bad as ever. It was then determined to make a systematic attempt to chloralize her, and for the next four days doses were administered at frequent intervals, according to the results produced. It was given not so much with the intention of producing sleep as with that of checking the movements. She was, of course, under careful observation, special attention being paid to the temperature and the state of the pulse. The quantity given at each dose, and the intervals between the doses, were left to the judgment of the resident officer in charge at any given time; for instance, she was never roused from sleep except to be fed, and, if one dose was ineffectual, another was given within the hour. Acting on this method, within a few hours from the time that chloralization was begun on the night of Sept. 6th, she was got under the influence of the drug and kept more or less so for the next four days, the quantity required to produce the effect being altogether about a hundred grains daily. She was fed by the mouth when possible, but enemata of milk, eggs, and brandy were frequently administered also. During the height of the attack her temperature rose to about 103° and kept at that level with slight fluctuations. This was probably due to the waking up of the rheumatism she had suffered from in the beginning, because she exhibited signs of pain and tenderness in the ankles, though there was no swelling there, and because at this time, and not till then, a very loud systolic murmur was to be heard at the apex, which could be heard up to the date of her discharge. It is worthy of remark that the chloral had no perceptible effect on the temperature. By Sept. 11th the violent movements had entirely disappeared and she would sleep for hours after the administration of one dose of ten grains. She had gained ground so far that the choreic movements were decidedly less marked than they were just before this acute exacerbation. The probability, indeed, is that if the chloral had been further pushed a few days more she would have been entirely cured of chorea. But, reduced as she was, in the absence of urgent symptoms, and bearing in mind the cardiac mischief, it was considered better to reduce the quantity of the drug and substitute tonic treatment as soon as possible. From the result of this case it seems probable

that we could—at the expenditure, it is true, of considerable trouble—reduce very materially the length of time spent in the cure (or watching rather, for it is surely doubtful whether the patient recovers any the sooner for the exhibition of the drugs ordinarily used) of cases of chorea.—*B. Baskett, M.R.C.S., etc., in London Lancet.*

IN PRAISE OF GOUT.—"I shall be happy to hear that my friend Joseph has recovered entirely from his late indisposition, which I am informed was gout; a distemper which, however painful in itself, brings at least some comfort with it, both for the patient and those who love him, the hope of length of days, and an exemption from numerous other evils. I wish him just so much of it as may serve for a confirmation of this hope, and not one twinge more."

The above quotation is from one of Cowper's letters, and well expresses the popular creed as to gout which was entertained during the eighteenth century. Since then we have become acquainted with granular kidneys and degenerate arteries, and our views as to the significance of podagra have received some modification. It may be suspected, however, that in this matter medical opinion has advanced faster than that of our patients. Many of the latter probably still share the believe of our good social poet. It may be suspected, too, that after all there was much truth in the old creed, and that to have gout is not in itself a bad omen in reference to longevity. Many gouty persons are undoubtedly to a large extent free from other maladies. They are persons who, as a rule, avoid and escape most of the diseases incident to low tone. They live up to their digestive powers, and do not so easily succumb to debilitating influences as some who adopt more abstemious habits. It must be remembered, too, that they usually come of good stock, and that their predecessors for some generations have been of vigorous stamina, and accustomed to live liberally. It is better to have a tendency to gout than to verge towards scrofula, anæmia, or neurasthenia, and to a large extent (though not absolutely) the one does exclude the others. If the man who has had an attack of gout will only allow it to serve as a warning, and henceforth select his wine with judgment, avoid all fruit, take plenty of salt, keep his bowels open, and never neglect exercise, it is probably still true that he has before him "the hope of length of days, and an exemption from numerous other evils."—*Jonathan Hutchinson in Archives of Surgery.*

SENILE HYPERTROPHY OF ARTERIES IN A TOTAL ABSTAINER WITHOUT CALCAREOUS CHANGES.—A case which in some respects I may contrast with the preceding one was that of a gentleman, aged seventy-two, who had been a total abstainer all his life. I was consulted on account of strangulated hernia, and was warned by his medical attendant that he had extensive disease of his heart and arteries, and would be a bad subject for chloroform. Notwithstanding this, as the anæsthetic was needed, we at once administered it, and he took it quietly, without the slightest undue disturbance of his circulation. The statement as to his pulse, however, was quite correct, for he had a most extraordinary condition of senile enlargement of his arteries. They were neither tortuous nor calcareous, but simply enlarged and thickened. His radial of both wrists felt almost as large as a cedar pencil, and beat vigorously. There was an intermission at every six beats. So far as I examined him I believe that the enlargement of the arteries was general, although not to so great an extent in other parts as in the radial. There was no murmur in connection with the heart, but it was probably somewhat enlarged. If we now ask as to the influence of this state of the arterial system on the patient's health, I have to record that its subject was a man who might be considered an example of perfect senile vigor. He was tall, thin, and florid, with a beautifully clear complexion, and not the slightest trace of duskiness. I believe he had never suffered from any discomfort at his heart. He was accustomed to take a daily journey from the suburbs to his business place in the city, and he could walk well. His boast was that until his present illness he had never spent a day in bed.

This case may be considered to prove that senile hypertrophy of arteries is not in any way secondary to other disease, that it has no connection with the use of alcohol, and is not necessarily attended by any inconveniences.—*Jonathan Hutchinson in Archives of Surgery.*

LADIES' DRESSES AND CONTAGION. — We have already had occasion to notice the supposed influence of the trains of ladies' dresses in spreading contagion. The matter has been warmly taken up in Vienna and Pesth, and we now learn that a regular crusade has been instituted by the Sanitary Board of Hungary against the obnoxious fashion. It is not to be expected that the justice of this course will pass unquestioned. By very many persons it will certainly be regarded as an instance of the mere enthusiasm of sanitation, having but the slightest foundation in reason or science, and as little connection with practical cleanliness. There is some room for argument on both sides, nevertheless. Granted that the germs of disease abound in a given quarter, no ordinary means could more effectually ensure their dispersion than the broom-like action of a flowing skirt. On the other hand, it is to be remembered that this very movement implies an admixture of air and oxygenation of the dust cloud. Then, again, one is tempted to inquire whether a reduction of the length of train is the best method of dealing with this question of germ dispersion by means of street dust. Would it not be better, in combating whatever contagion may linger among its particles, in spite of a purer surrounding air and sunlight, to rely upon the sanitary water-cart or hose and the scavenger's brush? If dress fashions are to be held responsible and forbidden, are the whirl of traffic and the bustle of hurrying pedestrians, though they wear no trailing robe, to be restrained also? We admit a cordial dislike to this latter garment, both on account of its close and clinging unwholesomeness as regards the wearer and on the ground of its public inconvenience. Nevertheless, the surest remedy for infection by means of dust is, in our opinion, rather to be sought in the cleansing of thoroughfares than in the restraint of fashions in dress.—*Lancet.*

FRACTURE OF THE HYOID BONE.—On Wednesday afternoon Mrs. C., æt. 25, called and wished me to treat her throat, saying that it was sore. She could then speak only in a whisper. In my examination I found the pharynx swollen and congested, and as the tongue was depressed it caused severe pain and suffocation. Externally over the hyoid there was marked ecchymosis. She confessed that on Monday evening, this being Wednesday, when in a quarrel with her husband, he had grabbed her by the throat and choked her twice. The first time he did not exert much force; then, renewing his attack the same as before, he choked her until suddenly she experienced a very severe pain and fainted. She was put to bed, and during the night she suffered extremely from suffocation, deglutition being very difficult. On Tuesday she felt a little better, but could only take liquid food, and even that she thought would suffocate her. That night she was about the same, but grew worse on Wednesday, and then consulted me. The swelling was so great that I could not determine the exact condition at that time, so prescribed Slevin's inhalation and poultices to the neck; this reduced the swelling so that on Thursday, by having an assistant hold the tongue out as far as possible, pressing my finger down the throat, compressing externally, I could distinctly feel the fracture of the greater cornua, near the attachment of the hyoglossus, all the pain and tenderness being at this point. I asked for a consultation, which was granted; the consultant agreed with me in my diagnosis. Will report the result and treatment later.—*A. L. Sherman, M.D., in Times and Register.*

A CURIOUS RESULT OF AN OPERATION FOR CONGENITAL HERNIA.—The contents of hernial sacs as revealed by operation are of the most varied description, but a remarkable surprise in this respect was the result of surgical interference undertaken by Jules Bœckel, of Strasburg, the other day, for the relief of a congenital hernia. The patient was a young man, æt. 20, for whose condition it was suggested to perform the radical cure. In the course of the operation the hernial sac was found to be empty equally with the inguinal canal. But to the posterior wall of the sac was attached a triangular-shaped body; this was drawn outwards and removed and the skin wound closed. Convalescence was established at the end of ten days. On a subsequent examination of the part removed the following curious facts were revealed: There was a double-horned uterus, the cavity of which was lined with ciliated epithelium; a Fallopian tube and a testicle with the epididy-

mis and vas deferens; a large ligament enclosing and supporting these two organs. The patient in other respects was a well-formed man, despite the fact that he was born with a uterus. —*Medical Press.*

THE COBWEB AS A STYPTIC.—When Bottom was "translated" and introduced to the attendants of Titania, he endeavored to ingratiate himself with Good Master Cobweb by saying, "When I cut my finger I will make bold with you." To arrest bleeding the application of a cobweb to the wound has long been a rural custom. Experience has shown that the gossamer of which the web is composed forms a very useful styptic; but a very fatal objection to its use arises from the fact that as an application to an open wound it can never be guaranteed to be surgically clean, forming, as it does, a net for insects, and at the same time for the germs of many an infectious disease. Evidence of this was produced before the Liverpool coroner recently touching the death of Martha Roberts, who, following the time-honored custom, had applied a cobweb to her wounded hand to stop the bleeding. Blood poisoning followed upon its application, and this terminated, unhappily, in a fatal issue. It is not a solitary case. The principles of asepticism have not yet become part of the intellectual equipment of the people, neither have its lessons succeeded in overcoming prejudice.—*Lancet.*

A CURIOUS PATIENT.—As good an instance of surgical wit as can be found is still told about the staff of one of this city's hospitals. A dangerous operation was being performed upon a woman. Old Dr. A——, a quaint German, full of kindly wit and professional enthusiasm, had several younger doctors with him. One of them was administering the ether. He became so interested in the old doctor's work that he withdrew the cone from the patient's nostrils, and she half roused and rose to a sitting posture, looking with wild-eyed amazement over the surroundings. It was a critical period, and Dr. A —— did not want to be interrupted. "Lay down dere, voman," he commanded, gruffly. "You haf more curiosity as a medical student." She lay down, and the operation went on.—*N. Y. Medical Record.*

THE
Canadian Practitioner
A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, JUNE 1, 1892.

HIGHER EDUCATION FOR WOMEN.

Is it possible, in our schools, to give too much encouragement to girls who contemplate a course of, what we are accustomed to call, higher education? Are women equally fitted with men to enter the learned professions, and to compete with them in the various employments of life hitherto solely occupied by men? It may be thought that these questions have long ago been definitely settled, and there is no more to be said in objection to the great "advance" which has of late years been made in the facilities afforded for the education of girls and women. It is well, occasionally, to pause and calmly consider the opposite side of a question when we find ourselves being carried on by the current of popular enthusiasm. An article appears in the *Lancet* which will excite a great deal of interest and criticism. It is an oration on "Sex in Education," delivered at the Medical Society of London by Sir James Crichton-Browne, M.D. He considers the tendency is unphysiological of ignoring intellectual distinctions between the sexes, of assimilating the education of girls to that of boys, of throwing men and women into industrial competition in every walk of life, and of making them compeers in social intercourse and political privileges; he thinks this tendency likely to lead to most disastrous results.

Dr. Crichton-Browne, at the outset, proceeds to trace out several bodily differences between the sexes. He deals more particularly with differences in the brain. After studying the results of an extensive investigation, he states that "all available evidence points to the conclusion that

the male brain exceeds the female brain in weight in this country to an even greater degree than has been hitherto supposed." The same differences in brain weight have been found in savage races. He quotes Broca in stating that the occipital lobes are more voluminous than in the male; the occipital lobes being, in his opinion, certainly sensory in their functions, whilst the motor areas of Ferrier in the parietal lobe are larger in the male than in the female. There is a superior symmetry of the female brain, due to the comparative poverty of secondary gyri. The specific gravity of the grey matter in every lobe of the brain in the female was lower (in a number of cases examined) than in the male. That the grey matter is of less density is probably due to the fact that it is less highly nourished in the female. Some interesting facts with regard to the vascular supply of the brain have recently been elicited by experiments by Dr. Crichton-Browne and Dr. Sydney Martin; the anterior portion of the brain is comparatively more copiously irrigated with blood in men and the posterior region in women. "The region of the brain which in men is most richly flushed with blood is that which is concerned, we have reason to believe, in volition, cognitions, and ideo-motor processes; while the region which in women is most vascular is that which is mainly concerned in sensory functions. There is a relation between the size of the cerebral arteries and what observation has taught us as to the intellectual and emotional differences between the sexes." We are reminded that all through life the male brain differs from the female in "capacities, aptitudes, and powers." Differences early assert themselves. Thus Thackery has said that little girls make love in the nursery and practise the arts of coquetry on the page boy who brings the coals upstairs; and as for the page boy, it is certain that his pugnacious propensities are already fully developed, and have brought him into conflict with his brother buttons. And differences are most patent of all in the prime of life, when man, "for contemplation and for valor formed," by "his fair large front and eye sublime" declares "absolute rule," and when woman, "grace in her steps, heaven in her eye, in every gesture dignity and love," stands conspicuous for "softness and sweet, attractive grace." And differences subsist to the last. The aged spinster left in "maiden meditation fancy free" lavishes her altruistic emotions on cat, poodle, or parrot; and the hoary veteran, fidgety and irascible, concentrates his egotistic attention on his own liver; and these differences in brain structure and function, which at every stage of existence separate the sexes, have a special pathological significance at the period when sexual divergence is taking place most rapidly, and when education is being pushed forward with most vigor.

Before the high school era dawned in England girls lived and learned and reasoned in a way, and in introducing them to the higher erudition these schools have withdrawn them to a large extent from homely household occupations, which were not without their educational value, and have substituted the dogmatic teaching of the hireling for the precept and example of the mother. Dr. Crichton-Browne remarks that if the high schools are faithful to prepare their pupils to become efficient wives and mothers, they should add housewifery in all its branches to their present curriculum. Four years ago the author of the article in question met, in the country, a high school girl who was reading Lucretius for her recreation, but she failed lamentably in the task prescribed of boiling a potato. "Now," Dr. Browne adds, "I am sure much more of the happiness and wholesomeness of life hinges on the boiling of potatoes than on the interpretation of Lucretius and his dark and doubtful sayings." In criticising an authority on overwork he says: "I read some time ago a paper by a distinguished authority on educational subjects, Dr. Emily Bryant, in which she argued that it is impossible to overwork girls, their inherent indolence and frivolity being proof against any stimulus that can be applied to them. Well, I would answer Dr. Emily Bryant that it is possible to overwork horses—witness splint, curb, thorough pin, and back sinew—and surely girls are not more obdurate than horses."

A most interesting and suggestive part of the paper deals with an investigation carried on concerning the health of high school girls in England. We find that of 187 girls belonging to the upper and middle classes, well fed and

cared for, and ranging from ten to seventeen years of age, as many as 137 complained of headaches. Sir Richard Owen once stated that "children have no business with headaches at all, and, if you find that these occur frequently in any school, you may depend on it there is something wrong there." And so there must be something radically wrong in high schools that produce so copious a crop of cephalagia. Again, a train of nervous disorders are said to arise from the same source. Thus the mental failure which follows upon severe overpressure and may be summed up as acute or apathetic dementia is an instance. "But besides apathetic dementia there are, of course, many other mental aberrations to which overpressure may lead up, the nature of these, in each case, being determined by the inherited tendencies, antecedents, or environments of the girl. We may have cyclones of mania or anticyclones of melancholia, hurricanes of morbid influences or the settled bad weather of moral perversion. And as regards certain minor mental changes which thus arise, it is noteworthy that they are often concealed by girls who do not comprehend and can scarcely describe them. This is particularly the case with reference to those voluminous mental states described by Dr. Hughlings Jackson which are sometimes the harbingers of epilepsy."

In addition, these victims of higher education are said to labor under a gastric disorder now so common that it might receive a distinctive appellation and be called *anorexia scholastica*, in which the lessened flow of energy from the exhausted nerve centres retards the functions of all the abdominal viscera.

Dr. Crichton-Browne warns us that the headachy girl is not unlikely to grow into the migrainous and invalid woman. A voluminous mental state may develop into epilepsy; somnambulism may lead to hysteria; insomnia lay the foundation of insanity; and anæmia at the growth period may entail lifelong debility. Overpressure operates on the high school girl at a great epoch of her life—at puberty, and during the pre- and post-pubertal periods—when momentous changes are taking place in her body and mind, and when a wave of irritability sweeps through her nervous system. The grand truth to be inculcated in all high school authorities is this: That they have to deal with girls at a period in life when vital resistance is greatly reduced, when the liability to disease is proportionately augmented, and when physiological indiscretions are peculiarly hazardous. One of the remote evils of overpressure in girls will be the propagation of phthisis in those who have been subjected to that overpressure. The indoor life of the girls, their sedentary habits, and the stooping posture in which they pass much of their time bring the lungs into a state that is favorable to tuberculous infection. The lungs are comparatively immobile, and there is consequent inactivity of the respiratory current in them, with a tendency to congestion and catarrh. Chorea, also, we are told, is a malady which, perhaps more than any other, may be directly attributed to overpressure and nervous strain."

The author of the article states that "Five men suffer from the motor form of writer's cramp for every one woman who so suffers, and the explanation of this lies on the surface, in the fact that men are employed in writing far more numerously than women. Four men die of general paralysis of the insane for every one woman who so dies. Is it not feasible to suppose, then, that women owe their comparatively small liability to this fell malady to their comparative freedom from the stress and striving of professional and business life which so often lead up to it in men? To make women katabolic—and that is, Dr. Browne maintains, what high school education tends to do; to throw them into competition with men—and that is what some high school education aims at—is to ensure them a largely increased liability to organic nervous disease. And so overpressure from ten to seventeen years of age may have amongst its remote consequences not only the reproduction, in the same or modified forms, of the functional nervous disorders which so often manifest themselves at that period, but a crop of gross nervous degenerations which have, up to this time, been rarely seen in women; and, notwithstanding all Wiedemann's arguments, Dr. Browne remarks: 'Woe betide the generation that springs from mothers amongst whom gross nervous degenerations abound.'"

In discussing the action of one of the Scotch universities in opening its class rooms to

women, Dr. Crichton-Browne states: "I must, however, even now express my belief that the University of St. Andrews, in deciding, as it has lately done, to open all its classes in Arts, Science, and Theology, to women as well as men, has taken, not a retrograde step—for our ancestors never did anything so foolish—but a downhill step towards confusion and disaster. Its now empty benches may be thronged with pupils, its professors may fatten for a time on duplex fees; but the attempt to educate young men and women, not only on the same lines, but in the same coaches, cannot but prove injurious to both. 'What was decided amongst the prehistoric protozoa cannot,' it has been well said, 'be annulled by Act of Parliament, and the essential difference between male and female cannot be obliterated at a stroke of the pen by any senatus academicus. To essay such work is to fly in the face of evolution."

In summing up the evidence advanced, Dr. Browne concludes his interesting paper as follows: "With this divergent differentiation of the sexes has come more reciprocal dependence and higher harmony. It is no question of superiority or inferiority of the one sex to the other. Each sex is higher, each is lower; together they make up the perfect whole, separate they are infirm; in union they are strong, in competition they are mutually destructive. It is in the sympathetic accord of the differentiated sexes that human progress can alone be hoped for. Men and women are constitutionally adapted to different work in the world. To set them to do the same work is wasteful and detrimental to the sex that is less adapted to it. It is impossible to contemplate with complacency some of the experiments in this direction which are being carried out, and it is impossible to speculate, from a medical point of view, without apprehension, what the outcome of such experiments may be, or what high school and college and hall education may do for the country in a few generations if they be pushed on with relentless zeal."

THE THERAPEUTIC VALUE OF LILY OF THE VALLEY.

For some years past there have been occasional magazine and other fugitive articles about this drug, so well known as a plant, but so little known and used as a drug. Its Linnæan name is *Convallaria majalis;* N.O., Liliaceæ; part used, the whole plant, or any part of it; preparations differing, as we shall see, in properties according as the flowers, stems, or rhizomes and rootlets are used; habitat, the temperate northern hemisphere; wild and cultivated. The Caucasus is particularly rich in the plant, and it has been long in use in southern Russia among the peasantry. Clinical observation has been amassing upon it, so that a reliable statement may be made of its value and use.

Its active principles are two, at least the important ones: *Convallarin*, a glucoside, crystalline and acrid, residing chiefly in the stem, rhizome, and rootlets, and a strong emetic and cathartic; and *Convallamarin*, also a glucoside, bitter and amorphous, found chiefly in the flowers, and a valuable cardiac stimulant and diuretic. This statement is very important, as its bearing upon the relation between the preparation used and the result attained is at once evident. By far the more important of the two is the latter, clinical experience not having given the former any prominence as an emetic and cathartic better than those in ordinary use.

The preparation, then, that should be employed is an alcoholic tincture of the flowers, 4 ozs. of flowers to the pint of dilute alcohol, in doses of 20 to 30 m.; or the fluid extract of the flowers, that made by Parke, Davis & Co., of Detroit, being hitherto most reliable, given in doses of 5 drops three times a day up to 20 or 30 m. every four hours or more. Other preparations are fluid extract of the herb and fluid extract of the root, not likely to be of such service for the reason given above; pill of convallamarin $\frac{1}{12}$ gr., and tablet triturate convallamarin, $\frac{1}{60}$ gr.

Points of interest in its dosage are that it has no cumulative effect, and that smaller doses, of the size stated above, have vascular and cardiac sedative and diuretic effects quite equal to those of much larger doses, even half a fluid ounce at a time. It is to be noted, too, that idiosyncrasy is to be guarded against, small initial doses being employed.

Physiological experiment has shown, in both warm and cold-blooded animals, that the cardiac contractions are retarded, with an increase

in their energy and in blood pressure. In warm-blooded animals this retardation is followed by markedly accelerated contractions and still higher blood pressure, the heart finally being arrested in systole, as in digitalis poisoning, and the blood pressure falling.

This statement naturally leads to a comparison of convallaria and digitalis. As regards their diuretic effect, they are both cardiac diuretics, the advantage lying with convallaria in that it has no cumulative effect, and that diuresis, if established, lasts some days, four or five, without the continuance of the drug. When heroic doses are necessary, convallaria may be given more safely than digitalis. It has the great additional advantage of not causing gastric disturbance. That state of the renal epithelium which causes albuminuria hinders its diuretic action. As regards the stimulant effect of the two drugs on the heart-muscle, authorities such as Sée and Dujardin-Beaumetz give convallaria the first place, as it is not so dangerous in myotrophic changes in the heart, and acts as a powerful regulator of nervous function, both of the sympathetic and cerebro-spinal systems. Particularly in cardiac neuroses, such as palpitation, smoker's heart, the "irritable" heart of anæmia or hysteria, whether accompanied or not by organic change, it seems to be a most valuable therapeutic agent. Valvular lesions are notoriously accompanied by irritability in the patient, and a sense of comfort and *bien être* is secured in most cases very promptly and peevishness relieved.

Authorities are disagreed as to the value of convallaria over digitalis as a cardiac tonic in cases where the heart muscle is diseased; *e.g.*, in convalescence from acute disease, such as typhoid. The rule against digitalis in such cases is not yet established against convallaria, and Sée claims efficacy for it. The latter authority, as a result of many experiments on both animals and man, has summarized as follows:

"First: Convallaria majalis constitutes one of the most important cardiac remedies which we possess.

"Second: . . . Convallaria produces on the heart, blood vessels, and respiratory organs effects constant and constantly favorable, to wit: Slowing of the heart beats, with often a restoration of the normal rhythm, and, on the other hand, augmentation of the energy of the heart, also of the arterial pressure; in fine, the inspiratory force is increased and the *besoin de respirer* is less injurious, less painful.

"Third: The most powerful, constant, and useful effect is the abundant diuresis, which is, above all things, essential in the treatment of cardiac dropsies.

"Fourth: The therapeutic indications are summed up as follows:

"(*a*) In palpitation resulting from exhaustion of the pneumogastric nerves (cardiac paresis), the most frequent source of palpitations.

"(*b*) In simple cardiac arrhythmia, with or without hypertrophy, with or without lesions of the orifices or valves.

"(*c*) In mitral constriction, especially when it is accompanied by failure of compensation on the part of the left auricle and right ventricle; the contractile force augments visibly under the convallaria, as the sphygmograph testifies.

"(*d*) In mitral insufficiency, especially where there are pulmonary congestions, and when, as a consequence, there is dyspnœa, with or without nervous trouble of the respiratory apparatus.

"(*e*) In Corrigan's disease the peripheral arterial pulsations disappear, and respiration becomes markedly restored. In dilatation of the left ventricle without compensatory hypertrophy it restores energy to the heart, which tends to become more and more feeble and dilated.

"(*f*) In dilatations of the heart with or without hypertrophy, with or without fatty degeneration, with or without sclerosis of the muscular tissue, the indications for convallaria are clear.

"(*g*) In all cardiac affections indifferently, from the moment that watery infiltrations appear, the drug has an action evident, prompt, and certain.

"(*h*) In lesions with dyspnœa the effect is less marked. To combat cardiac dyspnœa, convallaria is inferior to morphine, and especially to iodine, but morphia suppresses the urine, and iodine is in every way preferable. The combination of iodide of potassium with convallaria in the treatment of cardiac asthma constitutes one of the most useful methods of treatment. Finally, in cardiopathies with dropsy, the convallaria surpasses all other remedies. One is often obliged to suspend the use

of digitalis on account of vomiting, digestive disturbances, cerebral excitation, the dilatation of the pupil which it so often produces after prolonged use. The final action of digitalis is exhaustion of the heart, increase with enfeeblement of the heart's pulsations, just the opposite effect from those we seek when we give the drug.

"Convallaria has no deleterious effects on the economy, and has no cumulative action."

Hospital Reports.

SEPARATION OF THE LOWER FEMORAL EPIPHYSIS.*

Under the care of A. Primrose, M.B., C.M. Edin., M.R.C.S. Eng., in the Hospital for Sick Children, Toronto.

Willie Macklin, æt. 13. At half-past seven o'clock on Thursday morning (Nov. 12th, 1891) he was trying to pass from one room to another by climbing out of one window and into another, the rooms being situated in the third storey of the house, 30 feet from the ground. He missed his footing and fell, falling on a driveway. His sister and mother went immediately to his assistance, and found him lying unconscious. He was carried into the house, and about half an hour after he became conscious. Dr. Primrose was sent for, and found the patient at 8.30 a.m., lying in bed, with the left leg flexed on the thigh, at an angle of 80°. The thigh was also flexed on the abdomen. There was perceptible swelling at the knee-joint. The boy complained of pain in the knee. There was a considerable amount of blood about the face. He had a cut in the lower lip 1½ inches long, through the entire thickness of the lip, ¾ of an inch below the free margin of the lip. He had knocked out the left upper central incisor tooth. He had a small wound in the right ala of the nose. Dr. Primrose examined the injured limb and concluded that a fracture existed, but could not determine the exact site; there was undoubtedly some implication of the knee-joint in the injury; the swelling within the synovial sac occurred immediately after the injury; it probably was filled with blood and serum. A long splint was applied, the limb first of all having been straightened by traction at the ankle. The splint extended from the foot to the axilla, and was secured by a leg-bandage, a spika at the hip, and a wide roller around the chest. Four stitches were put in the wound in the lip.

Dr. Primrose advised that the child be sent to the Children's Hospital. This was done, and he was admitted at 11 a.m. On admission, the child was put under chloroform and examined. The femur was carefully examined, but no fracture discovered by direct manipulation of the bone. The leg was then grasped above the ankle by one hand, and the other hand applied over the condyles of the femur. It was found that very marked movement occurred laterally at the condyles, at a point apparently just below the adductor tubercle on the inner side, and at a corresponding point on the outer side. The movement (although not carried out extensively) was very perceptible, the lower fragment rocking from side to side on the upper, producing at the same time soft crepitus. The patella, on being pressed back firmly against the femur, and on being rubbed from side to side, gave a very perceptible crepitus, a roughness which was well marked. (This fact was noted at the boy's home. It was found that there was no pain on manipulating the patella alone, but on pressing it back against the femur pain was elicited, and the roughness spoken of noted.) The swelling at the joint was very great. On careful measurement being taken from anterior superior spine to the internal malleolus, there was found to exist scarcely half an inch of shortening in the fractured limb. The limb was placed in good position and a long splint from the axilla to the ankle applied with extension 6 lbs., the limb being retained in an extended position.

Dec. 9th, 1891. There has been some irregularity of the temperature since admission. There has been nothing special to note in his condition. The swelling in the knee has been very obstinate, but is slowly diminishing.

Dec. 12th, 1891 (four weeks after the injury). Dr. Primrose removed the splints and attempted passive movement at the knee-joint. A very small amount of flexion was possible, through an angle of, say, 8°. This was not accomplished without considerable pain to the patient, and the breaking down of adhesions was perceptible, some giving way with a distinct crack Directions were given to have passive movement

*A case presented at the Toronto Medical Society.

carried on daily, increasing, from time to time, the amount of flexion.

Feb. 6th, 1892. Passive movement has been carried out regularly; for the past five weeks he has been out of bed, rolling about the ward in a wheel-chair; latterly he has been walking with the aid of a stick. The splint was left off Dec. 27th, 1891, and he has not worn any fixation apparatus since.

The measurements from anterior superior spine to internal malleolus were: Left, 31½ inches; right, 32 inches. There was ½ inch of shortening on the affected side. Extension at the knee-joint was normal, and he could flex the leg so that the leg formed with the thigh an angle of 50°, or, in other words, the amount of flexion was through an angle of 130°. He was told to contine passive movement, and to increase still further, if possible, the amount of flexion.

The patient was discharged.

Remarks by Dr. Primrose: Separation of the lower epiphysis of the femur is not of common occurrence. When it occurs from extreme violence it becomes an injury which, as a rule, results in very disastrous consequences, and it is probable that the injury seldom or never occurs *in healthy subjects* unless the violence be extreme.

The patient I show you fell a distance of thirty feet, and, as the result, fractured the femur at the lower epiphysial line. It seems remarkable that the deformity resulting was not greater, and that the injury to the knee-joint and the surrounding soft parts was not more severe. If, in fact, the present instance exemplified the usual results of such an injury, we would be very much misled by the accounts given by authorities on fractures; thus in Hamilton's treatise on fractures and dislocations, we have recorded a number of cases illustrating the different conditions found associated with separation of the lower femoral epiphysis. I may briefly refer to these:

Case 1.—A boy of 11 years. The shaft of the femur was driven behind the condyles. The limb was amputated.

Case 2.—Fracture caused by traction on the foot in the act of birth. Child born dead.

Case 3.—Boy, æt. 18. Caused by violent blow on lower part of femur. Impossible to reduce the fracture. Gangrene ensued. Limb amputated on 5th day.

Case 4.—Boy, æt. 11. Compound. Amputation performed on 13th day.

Case 5.—Compound. Amputation.

Case 6.—Boy, æt. 9. Compound. Amputation.

Case 7.—Boy, æt. 12. Compound. Recovery ensued, with shortening of ¾ of an inch and anchylosis of knee-joint.

Hamilton, therefore, does not report any case which terminated in as favorable a fashion as that which I now present to you. The points worthy of note concerning my patient are:

(1) The violence was great, and the injury produced was one which seldom occurs without extreme violence; nevertheless the injury produced was restricted chiefly to the seat of fracture in the bone, and the joint and surrounding soft parts escaped in a manner quite unusual.

(2) The ease with which the deformity was reduced.

(3) The complete restoration of the function of the joint, and the small amount of deformity of the limb (*i.e.*, ½ inch of shortening).

CASE OF RENAL CALCULUS—NEPHROLITHOTOMY—RECOVERY.

Under the care of A. McPhedran, M.B., and I. H. Cameron, M.B., in Toronto General Hospital.

(REPORTED BY R. H. GOWLAND, M.B.)

Matthew B., æt. 24, teamster. Admitted into Toronto General Hospital, March 14th, 1892, under the care of Dr. McPhedran. At that time he complained chiefly of some failure of general health, of severe pain in the lumbar region, and he had a peculiar gait, walking quite lame and holding the right leg and thigh somewhat flexed.

Family History: Good

Past History: Has always been a strong, healthy fellow of regular and temperate habits. Had typhoid fever ten years ago, but otherwise perfectly well until about two years ago, when, on lifting heavily, he felt a violent pain in the back. At next micturition urine was markedly bloody and the hemorrhage continued, gradually diminishing for four days, when it again appeared normal. Patient stopped work for three weeks, but suffered at irregular intervals from severe pain, which began in the right

lumbar region and ran along the course of the ureter to the testicle of the same side. The testicle retracted during a paroxysm of pain. At the end of the above time he felt somewhat better, and took a position as street-car driver, working steadily for seven months. During this time he was quite free from pain, and, thinking himself well, he returned to his former occupation. About six weeks later, however, the pain returned, with the same characteristics, but without any hemorrhage, and he was forced to leave work for a short time. After a few days he started work again and continued till spring, when he had a similar attack. He worked on till October, when he received a severe shaking up by the upsetting of a load of wood. Since this time pains have been more frequent and severe, and he has not worked steadily. In April, while ploughing, he had a second hemorrhage, lasting about three days, and since that time he has done no work. Medicinal treatment was tried by several physicians, but gave no relief. The paroxysms were usually relieved by hot fomentations, but towards the last these were useless.

Present Condition: Has a healthy appearance, but says he is considerably weaker than he was a year ago. The gait is peculiar, resembling, in some respects, that seen in morbus coxæ, but all the movements of hip-joint are free and painless, and the characteristic signs of joint disease are absent.

Urinary System: No pain on micturition; frequency normal; on deep abdominal palpation over the right kidney some tenderness can be observed, but no dilatation of pelvis or ureter.

Examination of Urine:

Gross: Quantity, normal; color, ditto; reaction, slightly acid; specific gravity, 1030; slight flocculent precipitate on standing.

Chemical: Trace of albumen, due to the presence of pus.

Microscopic: Pus cells; ten to fifteen in a field; oxalate of lime crystals about same number; red blood corpuscles, a few.

Nervous System: Does not sleep well on account of pain. When lying on left side he has a dragging sensation, and when on right a feeling of soreness. He also complains of considerable frontal headache and dimness of vision.

Alimentary System: Tongue slightly coated and appetite only fair; otherwise normal. Rectal analysis showed the prostate and vesiculæ seminales normal.

Dr. McPhedran pointed out that the symptoms were very typical. The seat and direction of the pain, the retraction of the testicle, the hæmaturia and pyuria, without the presence of mucus, taken with the other characters, are very significant, and from the abundance of oxalate of lime crystals it is fair to judge that the calculus is composed of oxalate of lime; the severity of the pain would also indicate that. It must not be forgotten that the pain is not necessarily referred to the side on which the calculus is located.

The diagnosis of calculus of the right kidney seemed so clear that the patient was referred to Dr. I. H. Cameron for operation, and on March 26th Dr. Cameron, assisted by Dr. Primrose, made a lateral lumbar incision exposing the kidney. On palpation nothing abnormal could be felt. A needle was then introduced, and, after some search, the point came down on a substance giving a clear click and a firm feeling of resistance. A limited incision was made in the kidney substance over the position of the stone and forceps applied, but it was only with great difficulty that it could be dislodged. It was firmly imbedded in the kidney structure towards its upper extremity, and projected partly into the pelvis, the projecting part being covered with the mucous lining of the part. When removed it weighed sixty-two grains, had a distinct capsule which came away with it, and, as would be expected from the urinalysis, was composed of oxalate of lime.

Further examination revealed no more calculi. The wound was flushed with sterilized water at 110° F., a drainage tube inserted, and the wound closed by superficial sutures. A dressing of iodoform, with Keith's preparation (carbolic acid, 1 part; glycerine, 7 parts), and large pads of absorbent gauze were applied, and the patient sent to bed.

The shock of the operation was considerable, requiring free use of spiritus vini gallici and 1/8 grain of strychnia hypodermically. For two or three days urine discharged freely from the drainage tube, but from this time it rapidly diminished, and at the end of a week scarcely

any escaped. There continued for considerable time a purulent discharge. The absorbent pads were changed as soon as any moisture appeared (about every six hours at first). The urine passed per urethra contained blood and pus, showing that the ureter and pelvis were free.

The patient is now quite well, and since the operation has had no attack of the characteristic pain.

Correspondence.

Editor of THE CANADIAN PRACTITIONER :

Again I must beg of you to assist me in refuting statements made by Dr. Benson regarding my views on diphtheria (CANADIAN PRACTITIONER, Feb. 1st and May 2nd, 1892). In my first answer, printed in your esteemed journal March 16th, 1892, I plainly showed that the above-mentioned gentleman had attacked "the disciples of the local-origin theory of diphtheria" for statements they never made, but which originated in the mind of Dr. Benson. Instead of taking warning through this reply, which was only intended to correct wrong statements regarding my views, and not for entering into a discussion which we then and there termed useless, Dr. Benson again tells your readers and myself that "Dr. Seibert's theory is that there is first an inflammation and secondly an exudation, so that the disease actually existed before the exudation appears by which the disease is recognized."

(1) Dr. Seibert never said this, no more than he would say that a wood fire could first burn without smoke, while in reality we have both fire and smoke within the same second.

(2) Dr. Seibert never had the audacity to advance any theory of his own regarding the pathology of diphtheria, but freely confesses that no amount of ink-wasting could induce him to think Dr. Benson, in Chatham, correct, and Klebs, Lœffler, Oertel, and Heubner all wrong.

(3) Dr. Seibert does not want to answer questions which can only be answered by a careful study of the wonderful work of the above-mentioned scientists; he simply asks not to be cited in the misleading and erroneous manner that Dr. Benson made use of.

(4) Dr. Seibert does not expect any one to try his submembranous local treatment of pharyngeal diphtheria with the chlorine water syringe devised for that purpose who is not even acquainted with the rudimental portions of modern diphtheria pathology, for this treatment is based upon these facts, but he does deem it unscientific and unfair to attempt criticism without a fair trial.

G. SEIBERT, M.D.

New York, May 14th, 1892.

Editor of THE CANADIAN PRACTITIONER.

There having appeared in the *Templar* of March 31st last, a paper published in Hamilton, and the organ of the Royal Templars in Canada, a portrait and laudatory notice of myself, containing statements that are a gross violation of good taste and professional ethics, I am required by the Council of the Toronto Medical Society to repudiate, through the medical journals of Toronto, all connection with the parts of the article which deal with me in a professional capacity.

Having been one of the organizers of the order in this country, and having held office continuously for seven years, the editor of the paper had often asked permission to publish my portrait, accompanied by a short biographical sketch. This permission I had refused until a few months ago, when the editor urged it, reminding me that a similar course had been taken with nearly all the officers of the society. I unadvisedly consented, and did not take the precaution to see the biographical sketch before it was published. Having worked with and been known to the editor during those years, he was quite conversant with my history, and penned the exaggerated statement on his own responsibility.

In reply to a note from me complaining of the statements made, he sent me the following:

HAMILTON, April 28th, 1892.

DR. B. E. MCKENZIE, Toronto, Ont.:

DEAR SIR AND BROTHER,—Replying to yours of the 26th April, I desire to express my sincere sorrow if any blunder or mistake of mine has placed you in an unfavorable position before the profession. I am very sorry now that I did not consult you with regard to the brief sketch before it was published. Newspaper men easily fall into a hurried, reckless way of slashing off matter of this kind without any thought of the technical etiquette of any society or profession.

I make herewith the emphatic statement that you had no knowledge whatever of the character of text which accompanied your portrait, and that it was written without any consultation whatever with you. We took the liberty to deal with you as we did with other officers of our association, looking at the matter purely from a society standpoint, with the desire of presenting you to your brethren in the most favorable light.

Yours fraternally,

W. W. BUCHANAN.

No other person can regret so keenly as I do the publication of statements such as those referred to above.

Yours very truly,

B. E. MCKENZIE.

Toronto, May 19th, 1892.

Book Reviews.

A Text-book of the Practice of Medicine, for the use of students and practitioners. By R. C. M. Page, M.D., author of "A Chart of Physical Signs of Diseases of the Chest," etc., Professor of General Medicine and Diseases of the Chest in the New York Policlinic, etc. New York: Wm. Wood & Co., 1892.

As the title and preface of this addition to medical literature indicate, it is a students' manual, 557 pages, with index and blank pages added for memoranda. As a text-book in medicine it seems, for compendiousness and condensation, quite comparable to Walsham's text-book on surgery. The letterpress, binding, and paper are quite up to the publishers' usual good standard, but room has been rather too rigidly economized in the spacing, heading, and paragraphing. Beginners in inductive study need all the education in the line of systematizing their work that can be given by the careful use of bold-faced type or italics in the proper places. There is no attempt at this, and no numbering of heads and sub-heads in discussing the various points of information regarding each disease. In this matter the book seems deficient. The classification of diseases is modern, and the discussion of each brief, especially as regards pathology, fuller as regards treatment than most texts, even prescriptions being given in some cases. In some of these the author betrays rather slipshod Latinity; *e.g.*, "Sig. ℥j ter die before or after meals," a hybrid combination of Latin and English that is not the best proof of high scholarship. The book has, on the whole, more merit than such compendious treatises usually possess, is modern and scientific in pathology, diagnosis, and treatment, and should be of service to the student, but scarcely to the practitioner.

A System of Practical Therapeutics. Edited by H. A. Hare, M.D., Prof. of Mat. Medica and Therapeutics in Jefferson Medical College, of Philadelphia, assisted by Walter Christie, M.D., formerly Instructor in Physical Diagnosis in the University of Pennsylvania. Vol. II. Philadelphia: Lea Brothers & Co., 1892.

The second volume of this system of therapeutics proves even more interesting and valuable than the first, dealing, as it does, with the treatment of those diseases most commonly met with in general practice. Syphilis, scarlet fever, typhoid, malaria, diphtheria, asthma, bronchitis, whooping cough, pneumonia, pleurisy, and empyema; diseases of the heart, blood vessels, and blood; diseases of the liver, gall bladder, stomach, are some of the subjects dealt with. The article on "Peritonitis and Appendicitis," by Roswell Park, and that on the "Diseases of the Rectum and Anus," by Charles B. Kelsey, will be found particularly useful.

The Pocket Pharmacy, with therapeutic index. A résumé of the clinical application of remedies, adapted to the pocket case, for the treatment of emergencies and acute diseases. By John Aulde, M.D. New York: D. Appleton & Co., 1892.

The author announces that "this small brochure is in the nature of a plea for small doses, to be administered in accordance with physiological deductions, and is the outgrowth of personal experience in general practice." Dr. Aulde is known chiefly for his roseate advocacy of arsenite of copper in the diarrhœas of children. May his pocket pharmacy obtain a more enduring fame than his arsenite!

The Medical Annual and Practitioner's Index. A work of reference for medical practitioners. 1892. $2. Bristol: J. Wright & Co. Toronto: J. A. Carveth & Co., 413 Parliament street.

This excellent annual makes its tenth appearance in a volume of increased size and value. Many physicians feel the need of some

work which shall keep them *au fait* with the advances in all the branches of medical science, yet they scarcely feel like taking so bulky a work as the yearly five volumes of Sajou's "Annual of the Medical Sciences." To such we can heartily recommend the "Medical Annual."

Pamphlets and Reprints.

Age of the Domestic Animals: Being a complete treatise on the dentition of the horse, ox, sheep, hog, and dog, and of the various other means of determining the age of these animals. By R. S. Huidekoper, M.D., Professor of Sanitary Medicine and Veterinary Jurisprudence, American Veterinary College, New York; late Dean of the Veterinary Department, University of Pennsylvania. Philadelphia and London: F. A. Davis, 1891.

Mme. Lachapelle, Midwife. By Hunter Robb, M.D., resident Gynecologist to the Johns Hopkins Hospital. Johns Hopkins Hospital Bulletin No. 18, 1891.

Action and Application of the Faradic Current in Gynecology. By A. H. Goelet, M.D. Reprinted from the *Times and Register*, Nov. 7th, 1891.

Intestinal Anastomosis and Suturing. By Robt. Abbé, M.D., Professor of Surgery to Post-Graduate School, of New York. Reprinted from *Medical Record*, April 2nd, 1892.

Cases of Gall Bladder Surgery. By Robert Abbé, M.D. Reprinted from *New York Medical Journal*, Jan. 30th, 1892.

Conservative Treatment of Inflammatory Diseases of the Uterine Appendages and Sequelæ by Electricity. By A. H. Goelet, M.D. Reprinted from *Annals of Gynecology*, Boston, Feb., 1890.

Personal.

DR. THIRD, of the Toronto General Hospital House Staff, has been very seriously ill with facial erysipelas. Grave fears were entertained for his recovery, but he is now apparently mending. His many friends join in wishing him a safe and speedy convalescence.

Therapeutic Notes.

THE BEST DISINFECTANTS.—The Health Department of the city of New York has contributed much towards a proper understanding of the uses of disinfectants, and the following summary of the results recently determined by this department, as showing the relative value of the below-named germicidal chemicals, may be relied upon as accurate and conclusive. The germ-destroying power of the several agents was tested on the ordinary bacteria of putrefaction. They ranked in effectiveness in the following order:

Corrosive sublimate, 64 grains to the gallon.
Carbolic acid, 5 per cent. solution.
Bromine, 1 lb. to 200 gallons.
Permanganate of potash, 17¾ ounces to 200 gallons.
Chloride of lime, 4 ounces to the gallon.
Sulphate of iron, 1½ lbs. to the gallon.
Sulphate of zinc, 4 ounces to the gallon.
Common salt, 2 ounces to the gallon.—*Thomas J. Keenan in American Druggist.—Doctors' Weekly.*

FETID PERSPIRING FEET.—Dr. Bordet gives the following formula:

℞.—French chalk . . 40 parts
Subnitrate of bismuth . 45 "
Permanganate of potassium 13 "
Salicylate of sodium . . 2 "

M. This powder should be dusted daily into the stockings. The feet should be washed every morning and evening, and after washing rubbed with alcohol.

The method of treatment recommended by Unna is as follows:

℞.—Ichthyol . . . 5 parts
Turpentine . . . 5 "
Zinc ointment . . 10 "
—*Doctors' Weekly.*

TREATMENT OF CYSTITIS BY OXALIC ACID.—Dr. Renaud (*Le Bulletin Médical*, No. 12, 1892) has used oxalic acid for a long time in the treatment of cystitis with satisfactory results. He employs the following formula:

℞.—Oxalic acid . . gr. xv.
Syrup of orange peel . fl. ℥j.
Distilled water . . fl. ℥iv.

A soup-spoonful every two days.—*Lancet Clinic.*

CHLORAL IN THE TREATMENT OF FURUNCLES.—A tampon saturated with the following mixture is said to be useful in the treatment of this affection:

℞.—Chloral . . 10 grammes
Aquæ.
Glycerine, *aa.* . . 20 grammes
—*Journ. of Cut. and Genito-Urinary Diseases.*

FOR HEMORRHOIDS.—

℞.—Atropinæ sulphat . . gr. iv.
Acid. tannic . . . gr. vj.
Morphinæ sulphat . . gr. vj.
Cocainæ hydrochlorat . . ʒ ss.
Vaselin . . . . ʒj.
M. et ft. ung.

Sig.—Apply a small quantity to the hemorrhoid after each stool.—*Rev. de Ther. Gen.*—*Doctors' Weekly.*

GLYCERIN FOR BURNS.—"According to Dr. Grigorescu, of Bucharest, glycerin is a perfect and lasting analgesic in the case of burns. Applied at once to the burned surface, it occasions at the instant of application a slight feeling of burning, followed by complete relief from pain. Where the wound is large, it should be kept constantly moist with glycerin. By means of this application inflammation is almost entirely avoided, and sloughing takes place gradually, leaving a much less marked scar than is the case with ordinary dressings."—*Druggists' Circular and Chemical Gazette.*

Miscellaneous.

THE NEW REGIUS PROFESSOR OF PHYSIC IN THE UNIVERSITY OF CAMBRIDGE.—The appointment of Dr. Clifford Allbutt as Regius Professor in the University of Cambridge (in succession to the late Sir George Paget) will certainly come as a surprise to many. Dr. Albutt is a distinguished physician and a clinical teacher of no small repute. He is a graduate—in both Arts and Medicine—of the university in which he now becomes professor, and has also been an examiner in Medicine. A few years ago, however, Dr. Albutt relinquished all his appointments and gave up an extensive consulting practice at Leeds in order to accept a Commissionership in Lunacy. This office precluded him from private practice, and he fixed his abode in the metropolis. Dr. Allbutt now engages for a second time in a career in which he has already attained eminence. He is an original and outspoken thinker, and gave offence to many by his vigorous onslaught on some forms of specialism in the Goulstonian Lectures delivered before the College of Physicians in 1884. A man of very wide views himself, Dr. Allbutt may be trusted to worthily fill the post Sir George Paget adorned for so many years, though he is in many respects a marked contrast to his distinguished predecessor.—*N. Y. Medical Record.*

DR. JAMES STARTIN writes (*Brit. Med. Jour.*): "My attention has lately been drawn to some obstinate cases of local eczema occurring on the foreheads of men, especially young men; and, on looking for a probable cause, I found that the ordinary leather lining of hats—that is, the part that comes next to the skin on foreheads more particularly in the high hat—is whitened and glazed with arsenic and other irritating substances. Many times I have been puzzled to know why the ordinary remedies prescribed for this peculiar cutaneous eruption, simulating eczema in every respect, would not benefit the disease."—*Maryland Medical Journal.*

MEDICAL COUNCIL OF BRITISH COLUMBIA.—At the medical examinations held on 3rd, 4th, and 5th ult., there were six successful candidates, namely: Dr. Ferguson, Vancouver; Dr. Sproule, Victoria; Dr. LaBan, Nelson; Dr. Gordon, Vancouver; Dr. Duncan, Victoria; and Dr. Lambert, Yale. One candidate was rejected. The following are the officers elected for the year: President, Dr. W. A. DeWolf Smith, New Westminster; Vice-President, Dr. J. M. Lefevre, Vancouver; Registrar and Secretary, Dr. G. L. Milne, Victoria. The examinations are held three times a year—September, January, and May.

THE number of persons to whom anæsthetics were administered in the metropolitan hospitals of Sydney during the year 1891 was 1986. There were two deaths, one at the Moorcliff Eye Branch under chloroform, and the other at the Prince Albert Hospital under a mixture of chloroform and ether.

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THE

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EDITOR:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

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Original Communications.

THE MANAGEMENT OF THE THIRD STAGE OF LABOR.*

BY A. H. WRIGHT, B.A., M.D., M.R.C.S. ENG.,

Professor of Obstetrics in the University of Toronto.

A paper on this subject was read before a meeting of this Association in Hamilton eight years ago by the late Dr. George A. Tye, of Chatham. I was very much impressed by the views at that time enunciated, although I differed from the reader in many, if not most, of his conclusions. It was my pleasure to have an intimate acquaintance with Dr. Tye; and I am thoroughly convinced that he was one of the most conscientious workers, one of the most careful observers, and one of the grandest physicians that this country has ever produced. On the occasion referred to, he took a strong stand against Credé's method of expressing the placenta, and warmly advocated the expectant or do-nothing method. He stated that he had practised this plan of forcible expression for ten years, with bad results, inasmuch as he had a large number of hemorrhages. He had observed during a portion of that time that when called to cases which had been attended by midwives, who left the expulsion of the placenta to nature, that flooding seldom occurred, although the placenta was frequently retained a long time. He then abandoned the method, and pursued the expectant plan for seven years with good results. He thought that it not only tended to prevent the occurrence of hemorrhage, but also assisted in the prevention of puerperal fever.

With due respect for one whose opinions were always worthy of careful consideration, I will refer to some of his statements at a later stage.

On consulting Tyler Smith's work on obstetrics, which was the first I read in my student days, I find the following directions with reference to the management of the third stage of labor: "When the pains recur (after the birth of the child) gentle traction should be exerted upon the cord. . . . If there should be no pain, the finger should be introduced into the vagina, and the stringy insertion of the cord will generally be felt. . . . In extracting the placenta slow and gentle traction only should be used, as by this means the whole of the membranes . . . are likely to come away with the placenta." Other British obstetricians, and especially those of the Dublin school, at that time advised pressure on the uterus after the birth of the child as the best method of expelling the placenta, and preventing post-partum hemorrhage. To Credé, however, is due the credit of giving the most complete description of expelling the placenta by force applied externally to the uterus, as opposed to the method of extraction by pulling on the cord.

What, then, is Credé's method? I know of no procedure in midwifery which has given rise to more confusion than this same method. This has arisen from the fact that Credé in later years made an important change in the plan he

*Read before the Ontario Medical Association, June 1, 1892.

first adopted and described. After the expulsion of the child he applied friction to the fundus, and when the first uterine contraction occurred he grasped the fundus in his hand, with the thumb on the anterior wall and the four fingers on the posterior wall, and thus squeezed out the placenta—"as the seed from a ripe cherry compressed between the thumb and fingers." His aim appeared to be to complete the operation as soon as possible, and, according to some of his earlier statistics, the average duration by expression was 4½ minutes. This method was popular for years, although many opposed it. After a time the opposition grew stronger, and a reaction set in. It was then condemned as harsh and unscientific. I think there can be no doubt that the adverse criticisms which became so common at this time were essentially correct. In the hands of many, if not the majority, it was extremely harsh, and caused much unnecessary pain. Too much attention was given to a rapid expulsion of the placenta, and too little to the expulsion or extraction of the membranes. As a consequence, large portions of the latter were frequently left in the uterus. The rapid expression of the placenta partially emptied the uterus before retraction and contraction were properly established. Under such circumstances accoucheurs were likely to meet with two conditions —inertia of the uterus and retention of membranes—which together were always likely to favor post-partum hemorrhage. And yet Credé's chief aim was to prevent such hemorrhage.

It is somewhat remarkable that results so varied should follow any one plan of treatment. I think that in the hands of Credé and his assistants the results were generally satisfactory; but it was soon discovered that the dangers to which I have alluded were very serious in the practice of many who were either unskilled or improperly taught. Without going too minutely into details, I may say that Credé himself, after practising his method some years, recognized these defects, and accepted the rule that no one should endeavor to squeeze out the placenta until at least fiteen minutes had expired after the expulsion of the child. This extremely important modification of Credé's original method is a great improvement, and, while it makes the plan almost perfect in the opinion of the great majority, will account for the many misconceptions which have appeared in the numerous discussions which have taken place on this subject.

I have no doubt that the bad results which Dr. Tye noticed in his practice were entirely due to the faulty features in Credé's earlier efforts; together with the very defective descriptions of his work. When results so disastrous followed the obstetric efforts of so able and careful a practitioner as Dr. Tye, it is difficult to have any idea of the injuries which might follow such defective methods in the hands of the rank and file of the profession in this and other countries. In discussing the subject, I shall consider the modified Credé method and that of the Dublin school as practically the same, and actually the best known; but I think that many of the details are worthy of a critical discussion.

My description of my conception of the method need not be long. While the child is being expelled keep the left hand on the uterus, and endeavor to keep it contracted. In my own practice, my aim is to keep this hand on the uterus for at least half an hour after the expulsion of the child. I use the right hand to place the child in a proper position, or get the assistance of the nurse for the same purpose. I object to the practice of asking the nurse to press on the uterus while the accoucheur ties the cord. In my experience, I have not met one nurse in ten who is able to perform this duty effectually; and I make it a rule, on that account, to ask the nurse to tie the cord. If I am not satisfied with the way the ligature has been applied, I re-tie the cord after I consider it safe to remove my hand from the mother. Harsh friction or rough kneading is quite unnecessary. I would like to emphasize this point, because I have seen methods unnecessarily rough employed by competent practitioners. It frequently happens that a slight friction with one or two finger tips is quite sufficient to keep the uterus well contracted. Wait 15 to 30 minutes before making any active efforts to express the placenta. If possible, choose the acme of a pain, or, more correctly speaking, of a uterine contraction. Endeavor then to squeeze out the placenta either with one hand in the manner before referred to as described by Credé, or grasp the fundus with both hands, taking care to squeeze and press in the direction of the axis of the uterus. When you are confident that the placenta has left the

uterine cavity, I think traction on the cord, as practised by those of the Dublin school, will often afford material assistance.

After the expulsion of the placenta, we have to consider the extraction of the membranes. I say extraction, as distinguished from expulsion, advisedly; and I think the directions usually given in our text-books on this point are exceedingly defective. It is a very common practice to continue squeezing the uterus, and at once commence turning the placenta so as to twist the membranes into a cord. I believe the result of this method is frequently to tear through the membranes, while a considerable portion of the same is retained in the uterus, which is being squeezed so tightly. We are so thoroughly imbued with the *vis a tergo* idea in connection with the delivery of the child and placenta that we are apt to forget that the extraction of the membranes should be effected by an entirely different process. My advice in connection with this procedure is to take plenty of time—not less than 5 to 10 minutes. Don't drag away the membranes rapidly, but support the placenta in such a way that it will not pull forcibly on them; watch for slight relaxations or dilatations of the uterus, and during such coax them away. If you detect a slight tearing on one side, pull gently on the other. A little judicious twisting may assist sometimes, but remember the dangers connected therewith, and beware.

If no abnormal condition be present, it is quite unnecessary to introduce the fingers or hand into the vagina or uterus during the third stage of labor. In speaking to my class of students, or in giving directions for my cases in the lying-in hospital, I insist strongly that the finger shall not be introduced into the vagina after the delivery of the child if it be possible to avoid it; and, in the great majority of cases, such procedure is entirely useless. My objections, however, are not based on mere inutility, but on the fact that this is the period when there is the greatest danger of introducing septic matter into the system. The passage of the child has produced tears of greater or lesser extent in the cervix, vagina, or perineum, or perhaps in all three combined; and the open-mouthed blood vessels and lymphatics are ever ready to absorb and distribute through the body any poison that comes within their reach. If you happen to be in doubt as to whether small portions of membranes are retained, don't investigate too carefully; leave them alone; if no septic matter be introduced, they are not likely to do any harm. If you have reason to believe that large portions of membranes or placenta are retained, it will be necessary to introduce the fingers or hand and remove them; but be careful to use the best methods of cleaning your hand and arm which science and art have placed at your disposal. Wash and disinfect them as carefully as if you were going to perform an abdominal section.

Many discussions have taken place recently with reference to the physiology of placental expulsion. I have not time to discuss this question in detail, but I will give briefly the views which prevail with the majority. Detachment of the placenta is caused by a contraction in the area of its insertion, in which contraction the placenta itself cannot share. Separation occurs in different ways, varying according to the position of the placental insertion. When inserted at the fundus it begins to separate at the centre, forming a cavity in which a certain amount of blood accumulates. When separation is completed the fœtal surface of the placenta falls towards the cervical canal, and the membranes follow, being turned inside out and containing a certain amount of blood. The placenta and membranes emerge in the same order from the vulva. When the placenta is inserted in the anterior or posterior wall the separation begins either at the upper or lower edge, and, as it descends, may appear at the vulva either by its fœtal or maternal surface. The lower the insertion, the more apt is the maternal surface to present at the vulva. The views herein expressed do not coincide with those of Matthews, Duncan, and others, who thought that when there was no interference the common method of separation was such that the edge of the placenta presented at the cervix. The practical point to bear in mind in this connection is that when traction on the cord is employed before the placenta is dislodged from its place of insertion, the initial separation is central; a partial vacuum is thereby produced, which sucks the blood from the large uterine vessels, or tends to invert the weak and flaccid uterine walls. This generally admitted fact

fluid, rich in fat, and leave the lower, comparatively poorer, portion behind. When a child is to be fed there are taken of this:

Weak cream	3	tablespoonfuls.
Lime water	2	"
Sugar water	3	"

Sterilization not suggested.

This makes only four ounces, and if the child requires eight ounces at once double the quantities must be mixed. This is simply warmed and is ready for use. It is more economical and less liable to ferment than the mixture known to the profession as the Meigs' mixture. In place of the sugar water, I advise my patients to use boiled water and half a teaspoonful of sugar of milk. I also advise them to put it in the steamer and steam for from 20 to 30 minutes. This will keep for a day or two or longer in the hottest weather.

Whether the milk is prepared after this formula or not, it is always advisable to use only the upper half or third—the "top milk," as it is called "across the lines."

Within the last few weeks I have been giving this modified Meigs' mixture to a child a year old, and who was weaned four months ago. His capabilities for digestion were no greater than those of a good, healthy baby at six months. At once the mixture appeared to be digested, and now he is thriving on it better than on anything since his birth, though a short time before I had tried Rotch's preparation, and had to abandon it after a few days. Within twenty-four hours on Rotch's mixture the breath became sour; then followed vomiting of curds and the presence of curds in the stools.

Peptonized milk was supposed to completely revolutionize infants and children's feeding when first suggested by Fairchild Bros., only a few years ago. I advised it frequently for some time, and on many an occasion it appeared to work like a charm, especially in cases of gastro-intestinal catarrh. Latterly it has disappointed me, and during the last year I have not advised it more than two or three times.

Dr. Adams, of Washington, speaking of a couple of cases of gastro-intestinal catarrh in the Children's Hospital of that city not doing as well as his private patients, investigated and found that the resident physician was experimenting with peptonized and pancreatinized milk. He found that as soon as this was stopped and properly prepared cow's milk was substituted, the cases quickly recovered.

Condensed milk is frequently recommended by physicians and largely used by the laity. It contains a large proportion of sugar, often forms fat quickly, and thus makes large children. Children fed on condensed milk, though fat, are lethargic and flabby; although larger, are far from being strong; have little power to resist disease; often cut their teeth late and are likely to drift to rickets (Louis Starr).

Another writer—Baruch, in the *Dietetic Gazette*, July, 1888—writes in a similar strain. He says that children fed on a solution of condensed milk will take more food, absorb more water into the tissues, and produce less blood and muscle. Hence they cannot resist disease, and while they appear to be nourished they are anæmic, lymphatic, and they readily become scrofulous if the tendency exists.

Sometimes milk in every form, and however carefully prepared, ferments soon after being swallowed, and excites vomiting and causes great flatulence or distress, while it affords little nourishment. With these cases the best plan is to withhold milk entirely for some time and try some other food.

Whey is a very good substitute, and frequently tides a child over a critical period. I think of one now who lived ten days on it alone, improving daily. Or barley water may be used. Or keeping a child for some hours on whiskey and water, or whiskey and water may be alternated with the barley water, or a teaspoonful or two of the juice of raw beef will often be retained when everything in the shape of milk is rejected.

Such foods are only to be used temporarily, until the tendency to fermentation within the alimentary canal ceases; then milk may be gradually and cautiously resumed.

In regard to patent foods Rotch says: "They must necessarily be unreliable; their claims are not supported by intelligent and unprejudiced investigation." Further, he thinks "it is high time for us, as physicians, to appreciate exactly how inefficient in themselves, and how misleading in their claims, are these artificial foods, and also in what a false position, as protectors of and advisers to the public, *we* are placed in doing anything but ignoring them." He is convinced that the merit of their, at times,

apparent success does not belong to them, but to other accompanying circumstances.

Adams (of Washington) also "desires to enter a protest against the use of the various 'infants food' as substitutes for or aids to cow's milk. Mothers are attracted to them by the warnings posted in street cars, and the pictures of plump, rosy babies distributed by the druggists. Analyses by competent and honest chemists—not paid by the manufacturers—have shown them to be rich in the ingredients they are guaranteed not to contain, and to be deficient in those which are lauded as being present in larger proportion than in any other food."

Having arrived at the conclusion that cow's milk, modified, is the most suitable article of diet for babies and young children after weaning, we must look on another side of the question which is probably nearly as important; that is, the quantity and frequency of feeding.

Many mistakes are made in regard to these points. Emmet Holt says: "It has been my experience and observation that artificially-fed children are often fed two or three times too much and also too frequently, especially at night. There is no doubt that indigestion and diarrhœa are due in many cases quite as much to the quantity and frequency of feeding as to quality of the food given." Keating, of Philadelphia, also says: "The great mistake has been overfeeding."

So crude an idea have the majority of mothers in regard to quantity that I have been in the habit of late years, in the case of children who are very ill, of putting my directions in writing, giving the kind of food, the amount, and the frequency of feeding.

If a child from 12 to 18 months is well and his appetite demands additional food to the milk, he may have stale bread broken up in his milk, stale well-cooked bread and butter, a crust, stale bread moistened with red-dish gravey from beef or mutton, a sandwich of scraped beef, almost raw, or part of a soft-boiled egg with stale bread-crumbs in it. Any of these may be given once or twice a day except the last-named.

There is no well-recognized rule of feeding applicable to all cases. Each one must be regulated by its own particular requirements, and that line of feeding carried out which proves best suited to it. If a certain diet appears to agree with a child, as little variation as possible should be made in it. The child should be fed five or six times a day at nearly the same hours.

I do not like diet tables; as a rule, they are too suggestive of hospital life; but the following formulated by Louis Starr, of Philadelphia, seems a good one:

First meal, 6 a.m.: Cup of milk, with cream-biscuit or a slice of buttered bread.

Second meal, 8 a.m.: Stale bread broken and soaked in a tumblerful of rich milk.

Third meal, 12 a.m.: A slice of buttered bread with about half a pint of weak beef tea, or mutton, or chicken broth.

Fourth meal, 4 p.m.: Tumblerful of milk, with crackers or buttered bread.

Fifth meal, 8 p.m.: A tumblerful of milk, with bread and crackers.

By the time the child has reached the age of about two years, he is usually able to digest oat-meal or cracked-wheat, and these he may have with his 8 o'clock meal, and with the mid-day meal he may be allowed a piece of rare roast beef to suck, some mashed potatoes moistened with the dish gravy, and a little rice or farina. The other meals had better vary as little as possible from the diet table just given.

I try as well as possible to keep these little ones on an almost wholly milk diet till the dreaded "second summer" is over, and longer still if the child's digestion is not very good.

Up to this age it is probably better that the child should have its meals at a separate table rather than with the other members of the family. If it does not see food, it is not so likely to want it and get something it should not have.

Betweeen two and three years of age, a child is often more difficult to manage than a younger one, for it can walk about and help itself to all sorts of things. Its increased growth and size demand a greater variety of food than the younger ones. Its powers of mastication, its increased flow of saliva, its improved digestion, and increased assimilation call for this. It should be fed four times a day, with a drink of milk between meals if hungry. If well, it may be allowed ripe fruits in moderation, provided care be taken to prevent it swallowing seeds

and rinds. A popular fruit is the banana; but Dr. Adams' experience has been such that he considers it more productive of eclampsia than any other fruit, and consequently he cannot recommend it. (Cyclopædia of Diseases of Children.)

An important point, often neglected, is the matter of drink. Every young infant requires water several times a day, and the demand increases with the age of the child. The water should be pure, and not too cold. In hot weather especially, they should have it frequently.

It is scarcely necessary to say that the major portion of this paper refers to children who are suffering from improper feeding, and not so much the well ones, whose capability for digesting all manner of things is often a marvel.

CAUSES AND TREATMENT OF CARCINOMA.

BY L. TESKEY, M.D., M.R.C.S. ENG.,
Professor Pathology, Trinity Medical College.

There are two theories as to the nature of the cause of carcinoma which appear necessary to discuss, viz.: (1) That it is an abnormal growth of epithelium, probably resulting from irritations of various kinds. (2) That it is due to the influence of a special microbe, foreign to the body, and introduced in various ways.

Doubtless the immediate effect of irritation on living cells tends towards their death and destruction rather than growth, yet reproduction and growth follow as a sequel and are the secondary result of the irritant; but in that growth in the disease in question physiological laws are disobeyed, and pathological conditions take their place. To establish a theory of this kind we must recognize the independence of the life and growth of the cells of our body—that when supplied with nourishment, normally, they grow definitely and to perform a special function; pathologically, they grow indefinitely and without function, so long as nourishment is provided. While thus looking upon the cells of our body as being a kind of independent organism, any foreign microbe would be unnecessary to produce the phenomena of the growth of cancer.

But little observation is necessary to establish the causative influence of prolonged irritation, for it is the prolonged disturbance that is most effective, as is abundantly illustrated in epithelioma of the lip of the habitual smoker. In fact, so constantly do we find this disease located in such parts of the body as are most exposed to irritation—for example, the scrotum of the chimney sweep, the glands and prepuce of the genital organs of the male, the breast of the female, prominent warts and moles, the tips of the ears, the mouth, and the rectum—we seem justified in looking upon the relation as being that of cause and effect. I do not find any good reason for believing that this disease is hereditary, and, so far as my personal observation goes, it is the exception and not the rule to find the disease having previously existed in the family history; and where such existence is found, it could as reasonably be explained as a coincidence.

In connection with the subject of irritation, I beg to call special attention to the probable manifestation of the disease primarily at some distance from the point irritated, as illustrated by the following cases:

(1) Scirrhus in axilla from irritation of the thumb nail.

(2) Carcinoma of lymphatics of submaxillary region, and small abrasion in sublingual region.

Age appears to be a predisposing cause, and that there may be other predisposing causes is rendered probable, in view of multiple epithelioma sometimes existing.

As to the second theory, the evidence relating to the existence of a foreign germ negatives such conclusion.

One of the most valuable contributions to our knowledge on that subject will be found in the *British Medical Journal* of March 14, by Shattuck and Ballance.

I take it that not only do their experiments go to show that it is not probable that any organism such as a microbe exists, but they give presumptive evidence to the other theory advanced, inasmuch as the results are just what would be expected in accordance with it. For example, while inoculations were attempted between animals of different kinds, the inoculated material liquefied and was absorbed; like as when the blood of one animal is injected into

another, the corpuscles soon disappear; while, on the other hand, inoculations carried on with animals of the same kind were, in a degree, successful, as shown by the experiments of Dr. Hanan.

I therefore find myself believing, not as Dr. Shattock and Dr. Rollance, that a micro-organism foreign to the body would be found, but rather more probable that no such organism exists, and that the disease is due to abnormal growth of cells brought about probably by prolonged irritation, and that such irritation may be at some distance from the primary manifestations of the disease.

AS TO TREATMENT OF CANCER.

The first question which would naturally arise would be, Does nature make any effort to arrest this disease, and is it ever successful? In other words, do we ever have spontaneous cure? I think the indications are in the affirmative. How else could we account for that form of cancer called the atrophic form, where the nests appear to cease to progress and cicatricial tissues take their place?

Also we have the assertion that the complication of erysipelas may be curative. On that subject, I have no observations.

It would be difficult to account for the varied rapidity of similar forms of the disease in similar situations in different individuals without believing that there is varied resisting power.

HISTORY OF CASE.

Female patient of middle age eight years ago, having a tumor of the breast, sought medical aid, and was told by some of our leading physicians that she was suffering from cancer which required immediate operation, that she would not survive more than from six months to a year without operation, and that with operation they could not safely say that she would survive two years. About a year ago I saw the patient with her physician, who had her in charge for six years, she having declined operation. When I saw the case the right breast presented a large tumor, nearly as large as one's closed fist, of stony hardness, irregular, with retraction of nipple, and an ulcerated surface fully ½ to ¾ in. deep and of the area of a penny. The ulcerated surface was red in color and discharging but little.

I look upon this case as one in which the efforts of nature are prevailing against the disease.

And now, gentlemen, in view of the case which I have brought before you, and in view of the disease in question being at first a purely local one, what about the more active treatments of excision? In conclusion, I beg to submit, first of all, with a view to prevention, that an abrasion fissure or ulcer resisting all treatment and showing no tendency to heal under proper treatment for a period of two months should be excised.

(2) That excision is curative, but curative only while the disease is local and the operation carried wide of the parts affected, best done when the disease attacks the extremities.

(3) That after the lymphatics are affected, speaking generally, the value of operating is doubtful, and generally hastens, rather than delays, the fatal result.

This last conclusion I have reached believing that the excessive hemorrhage attending such operations lessens the resisting power and favors more rapid progress of the disease afterwards.

Selections.

LITHOTRITY IN CHILDREN.

BY F. A. SOUTHAM, M.B. OXON., F.R.C.S.,
Surgeon to the Manchester Royal Infirmary and to the Clinical Hospital for Women and Children.

In *The Lancet* of Feb. 15th, 1890, I published a case of lithotrity at a single sitting in a boy aged three years and a half, and since that date I have performed the same operation in five additional cases, brief particulars of which are here given:

Case.	Age.	Size of stone.	Structure.	Weight.	Duration of operation.	Result.
	Years.	Inches.		Grs.	Min.	
1	3½	Oval: ½	Ur.acid.	15	25	Up on 3rd day, discharged on 7th.
2	10	½×¾	"	45	70	Up on 5th day, discharged on 21st.
3	4	½×½	"	14	30	Up on 4th day, discharged on 7th.
4	5	1½×1	"	125	60	Up on 3rd day, discharged on 8th.
5	5	Oval: ⅝	"	13	20	Up on 2nd day, discharged on 8th.
6	3	" ⅞	"	32	45	Up on 4th day, discharged on 7th.

In each instance the result has been extreme-

ly satisfactory, confirming in every respect the Indian experiences of Surgeon-Majors Keegan and Freyer, who were the first to advocate and practise this method of treating stone in male children. In performing lithotrity in young subjects, one is surprised to find how extremely tolerant the bladder is of prolonged instrumentation, the essentials for success being, in the words of Surgeon-Major Keegan, "great gentleness and a light hand." With two or three ounces of fluid (boric lotion) in the bladder, and the pelvis and thighs of the patient slightly raised, so that the stone may fall back upon its posterior wall, the operation is a very simple one; in fact, much easier of performance than in an adult, the absence of any pouch or depression behind the prostate facilitating the seizure of the calculus and the removal of the fragments after it has been crushed.

Before deciding upon lithotrity in a child, it is, I think, advisable to know the exact size of the stone. This can be best estimated by measuring it with a small lithotrite when the child is sounded; more satisfactorily of course if the examination is made under anæsthesia. As cystitis is usually present to a greater or less extent, the bladder should at the same time—viz., while the patient is under the influence of the anæsthetic—be thoroughly washed out with boric lotion. For a few days previously to the operation the irrigation should be repeated each morning, an anæsthetic not being necessary. By this means the condition of the urine is improved, the cystitis is relieved, and the urethra becomes accustomed to the passage of instruments. If a soft India rubber catheter is used for the purpose, it causes scarcely any pain, and is usually well tolerated by the patient. In cases where the urine is very offensive—as happened in Case 2—small doses of boric acid may also be given internally. In none of my patients has it been found necessary to continue the irrigation after the operation, the removal of the calculus having been followed by a subsidence of the symptoms of cystitis. I am of opinion that by the employment of what we may term "urinary antiseptics"—drugs, such as boric acid, salol, etc., by means of which we are able to sterilize foul or toxic urine, and at the same time relieve inflammation of the bladder walls—the risks and after-complications of lithotrity in children, as well as in adults, are greatly minimized. As the operation is often somewhat prolonged, it is very important to guard against exposure to cold, and also to dimish as far as possible the effects of shock. With this object I always take care that the body and limbs of the child are wrapped in flannel bandages, and during the operation the patient lies upon a large, flat, hot-water tin, covered over with a blanket, which fits on the operating table. If hot fomentations are applied to the lower part of the abdomen and perineum after the operation, the child will usually pass urine in the course of a few hours without any straining or difficulty, and, beyond a slight smarting, with very little pain, usually much less than previously to its performance. In only one of my cases has there been any rise of temperature, and the following morning the patients have all been practically convalescent. It is, however, advisable to keep them in bed till the third or fourth day, when they may sit up in the ward, and at the end of a week they are usually quite fit to leave the hospital. In each instance the operation was performed with Weiss's Nos. 5 and 7 children's lithotrites, and the fragments removed with Nos. 6 or 8 evacuating tubes. In Case 4, as the stone was too large to be crushed with No. 7 lithotrite, it was first broken up with one of Weiss's small lithotrites for adults (about No. 9 size), and the operation was completed with Nos. 5 and 7 lithotrites. This case illustrates the fact that a calculus of considerable size—viz., over an inch in diameter—may be safely crushed in a young child. I believe that in the future lithotrity will quite supersede lateral lithotomy in children, and also that if a stone is too large to be crushed it will be an indication for the selection of the suprapubic operation.—*Lancet.*

THE FUNCTIONAL DISORDERS OF THE VOCAL MECHANISM.

Abstract of Paper

BY JOHN WYLLIE, M.D., F.R.C.P. EDIN.,

Physician to the Royal Infirmary, Edinburgh.

Two mechanisms in exact co-ordination with each other are concerned in the production of speech. 1. That of the larynx, which is the producer of the vocal element. 2. The oral element, by which the sounds of the larynx are

modified, and by which new sounds produced within the mouth itself are added to the vocal tones of the larynx. If the ordination becomes imperfect, the speech is at once interrupted and labored. That the defect of speech in the common variety of stammering is due to deluged action of the laryngeal mechanism in attacking the first syllable of words is an old proposition, which is maintained to the present day by the best observers. The truth of this is shown by many familiar proofs. Thus, the stammerer rarely, if ever, has the slightest difficulty in song. In like manner, they rarely have trouble if they intone or read poetry. All this shows that when a primary demand for voice is made, as in song, or other forms of rhythmical speech, sufficient energy is supplied to the laryngeal mechanism to cause the difficulty to disappear.

Intelligent use of the voice is one of the essential elements of speech, and this can only be fully attained by a knowledge of individual letter-sounds. Such a knowledge will enable him to readily throw the voice into the vowel or consonant that contains voice, and to touch off lightly any consonant that does not contain voice, bringing the voice out immediately in the vowel or vocalized consonant that succeeds it. For this purpose the author has prepared an an alphabet, so arranged that the voiced elements are separated distinctly from the voiceless. Such alphabets are not new. They have been constructed by Arnott, Pitman, in his phonetic system, Max Muller, Bristow, and others.

In studying the phenoma of stammering, three general causes are final:

(*a*) Faults in the local mechanism, by which term is meant not only the larynx, but also the lungs and muscles of respiration.

(1) Want of promptitude in the supply of voice during the pronunciation of the initial syllable.

(2) The voice may not only lag, but may also be feeble in quantity, because the speaker does not fill the lungs with air, but attempts to speak from a half empty chest.

(3) The voice sometimes breaks from its natural pitch during a struggle in speech and assumes a much higher key.

(4) There may be drawback phonation, the result of an attempt to speak during an inspirating effort.

(*b*) Faults in the oral mechanism, caused by surcharge of energy.

(1) The lagging of the voice and misdirection of energy cause the stammerer to surcharge his oral mechanism with energy so that he sticks at his explosives and prolongs his fricatives and nasal resonants.

(2) From the nerve-centres of oral articulation thus surcharged, an overflow in some cases occurs, producing spasmodic movements in the face and sometimes in other parts of the body. The most common of these are spasmodic twitchings of the lips and cheeks, working of the jaw, and forcible winking of the eyes.

(*c*) Overflow into the upper glottis. In a few cases, the energy imperfectly supplied to the vocal mechanism flows excessively, not only into the organs of articulation, but also into the upper or non-vocal parts of the larynx. This part has the false cords for its inferior margin, which is unclosed during phonation. If, however, the false cords close over the true and shut off the passage of air by their valvular action, the voice is at once interrupted and the patient, with open mouth and congested face, silently struggles without being able to emit the imprisoned air.

In beginning treatment it is best to first explain clearly to the patient the nature of his defect, and to show him that it is not the mouth, but the larynx that is at fault. He must therefore attend only to the voice and speak in a full, resonant, but natural tone. He should practise reading aloud, at first poetry, then prose. If he has an ear for music, he should cultivate the voice in song. He should be taught the physiological alphabet for which complete instructions are given by the author. He must be taught to fill the chest with air, but if he grasps the great principle of speaking with voice he does this instinctively. Extreme cases requires the instruction of a specialist, but, as a rule, persevering and intelligent practice will enable the patient to effect a cure for himself.

The prognosis depends largely upon the intelligence of the patient. Age is an important factor, being favorable between twelve and sixteen. Cases with severe spasmodic complications are unsatisfactory.—*Edinburgh Medical Journal.—Archives of Pediatrics.*

ABDOMINAL TUMORS FROM RETENTION.—In the examination of unusual conditions of abdominal enlargement it is difficult to make sufficient allowance for what is possible in the way of passive distension of the viscera. The urinary bladder may fill the belly, and even the gall-bladder may go far towards the same result. The ordinary cause of what is called "pot-belly" is accumulation of fæces in the intestines. In the rabbit, and perhaps in most herbivora, it is, strange as may seem the statement, usually the cæcal appendix which undergoes distension, whilst in the human subject the cæcum and colon is the tract involved. I am induced to ask attention to this matter on the present occasion from having recently read the following abstract of a case published by an Australian surgeon. It proves that a knowledge of what is possible is of great importance in order to the avoidance of most grave errors in practice:

"A remarkable case of fæcal accumulation is reported by Dr. R. Worrall in the *Australasian Medical Gazette*. The patient was a girl, aged thirteen, of a cachectic appearance, who had a rapidly growing abdominal tumor. Aperients were given, and for several days a large quantity of very offensive fæcal matter was discharged, but without any noticeable effect in reducing the volume of the tumor. As the child was evidently sinking, it was determined to make an exploratory laparotomy, the supposition being that the tumour was malignant. On opening the abdomen, however, the swelling was found to be an enormous accumulation of fæces in the cæcum and colon. The operation seemed to have had a stimulating effect upon the bowels, which acted almost continuously for a few days. In six days the tumor had entirely disappeared and the child made a good recovery, her life having probably been saved by an error in diagnosis."

Dr. Worrall's narrative brings to my mind a precisely similar case which came under my own observation many years ago. I was consulted by my friend Dr. Mundie, formerly of Dalston, in the case of a young girl who had "an abdominal tumor." The child was about twelve years old, pale and emaciated, and her abdomen was as large relatively to her body as that of the last month of pregnancy. She was confined to her bed. I found to my astonishment that in pressing the fingers firmly upon the swelling an indentation was left, as if it were so much dough. Further examination convinced both Dr. Mundie and myself that this was due to distension, by soft fæces, of an enormously dilated colon. The rectum was found to be full of the same. Suitable measures were adopted—first the spoon, afterwards enemata, aperients, and nux vomica—and the child was soon relieved of the accumulation and restored to fair health.

It must never be forgotten that in these cases there is often no obvious retention. In the one which I have just narrated there was, if I remember correctly, reputed incontinence of fæces and not constipation. This is constantly the fact in instances of over-distension of the urinary bladder, and it misleads often both the patient and the practitioner. In a very early period of my career I once tapped a woman's abdomen with a small exploring trocar and drew off urine. Fortunately no harm followed and I learnt a lesson. On another occasion, much more recently, I was taken into the country by an accomplished gynecologist to assist in the diagnosis of a large tumor which had puzzled him. The result of our examination was that we passed a catheter and took the tumor quite away. The lady had been voiding urine freely, and this had caused the mistake.

In at least one case on record, the abdomen has been laid open for ovariotomy, and the tumor then found to be a distended gall-bladder.

In the male subject I have known many blunders as to the diagnosis of a distended urinary bladder. Six or eight years ago an elderly gentleman travelled up from Devonshire to consult me with what he had been told was an incurable tumor in his abdomen. It was nothing but his bladder, but it presented the unusual feature of being not in the least tense, and, although it reached the navel, it felt loose, and could be easily pushed from side to side. Catheters were used, and, after the not unusual attack of cystitis as a result, recovery followed. This patient is, I believe, at the present time in the enjoyment of good health. It is a curious fact that in this, as in most other cases of painless vesical distension, no cause of obstruction could be discovered. They appear to be examples of simple atony.

During the last year I have attended another case exactly like that just narrated. An old gentleman, who averred that he had never in his life had the least difficulty in passing his water, had a very large abdominal tumor. A medical consultation took place, and a grave diagnosis was given. A week or two later I was consulted. I found the tumor quite lax, and easily swayed from side to side, but as it fluctuated and was in the middle line I could not doubt that it was the bladder. The catheter proved the correctness of this surmise.

I may venture to offer the following categorical memoranda for the avoidance of error in the recognition of abdominal retention-tumors:

(1) The distension, although enormous, is usually quite painless.

(2) The retension is never absolute, but only residual. There is always overflow.

(3) The patient never assists the surgeon, but rather misleads him, insisting that there is free relief of bowels and bladder.—*Jonathan Hutchinson in Archives of Surgery.*

ON THE USE OF THE ECRASEUR FOR TONGUE OPERATIONS.—In advocating the use of the ecraseur-wire (cold) for removal of the tongue or of parts of it, I am influenced solely by the belief that it is a much safer instrument than knife or scissors. It is quite true that by carefully tying each artery as cut, a dexterous surgeon, with good assistants, may get through an excision of the tongue with but very little loss of blood. Even in the best hands, however, exceptional cases will every now and then occur, and it is these which spoil the statistics. It is not merely the loss of blood which is dangerous, but there is always risk that some of it may find its way into the air passages. The loss of blood is, however, to the old and feeble persons, who are often the subjects of these operations, not a matter to be lightly thought of. That ecraseur operations are safe, that no risk whatever attaches to the sloughy surface which the wound is apt to assume a few days afterwards, I can testify from very considerable experience. For many years I have never used any other instrument, and, with the exception of one at the London Hospital, I have never lost a single patient. The division of the tongue is always accomplished without any bleeding, but after it is complete I always seek the lingual arteries and try to provoke them to bleed in order to tie them. This is done by way of precaution, for since I abjured the cautery wire I have had no trouble with secondary hemorrhage. The bleeding of the linguals referred to is always very feeble, just sufficient to reveal the artery and no more. It never involves any risk of blood passing back into the throat. I now always use a cold iron wire and cut very slowly, taking at least half an hour to the procedure. It is not a showy operation, but I repeat that I believe it far safer than any other. As regards the place of election, I always now content myself with being well behind the disease, and by no means regard it as essential to take the whole tongue. If the disease is on one side, the line of section crosses the tongue obliquely. There is no inconvenience as regards subsequent speech from these oblique divisions, and I very decidedly prefer the stump left by them to that resulting from the removal of one longitudinal half of the organ. One great advantage which, in my opinion, attaches to the ecraseur is that operations by its aid require patience only in order to success. They may be performed by any one at any time, and the operator is but little dependent upon his assistants. This is an advantage not to be despised when we remember that the circumstances under which cases of cancer of the tongue first come under surgical observation are often such as do not permit of immediate recourse to a hospital or to a surgeon of special experience in such cases. Were operations of this kind less formidable in the general estimation of the profession, we may feel sure that they would often be performed at much earlier periods; and this, after all, is the grand condition as regards permanent results.

Postcript.—Since the above was written, I have received the ninth volume of the "Transactions of the Royal Academy of Medicine of Ireland," which contains an important paper on "Excision of the Tongue for Cancer." The paper is by Mr. Croly, and warmly advocates ligature of the lingual arteries as a preliminary to the operation, thus bearing testimony to the fact that, despite modern methods, the risk of bleeding is, to him, still a matter of considerable anxiety. In the course of the discussion, Mr. Lestaigne stated that "he had seen several cases

in the hands of excellent surgeons where very severe hemorrhage had occurred." These admissions quite accord with facts which come to my own knowledge; for although some of my friends who use scissors speak very lightly of bleeding, I still hear not infrequently of cases in which it proved severe, and in all probability much prejudiced the patient's prospects.—*Jonathan Hutchinson in Archives of Surgery.*

CASE OF CHOREA TREATED BY CHLORAL HYDRATE.—The following is a case which recently occurred in the Bristol General Hospital, where I was physicians' assistant at that time, and which, as it may be of interest, I am allowed to publish by the kind permission of Dr. J. Mitchell Clarke:

A. Y——, a strong, well-nourished girl of fourteen years of age, engaged as a pupil teacher in a national school, was admitted on Aug. 24th for rheumatism accompanied with chorea. It was her first attack, was mainly right sided, and presented no unusual feature; it was attributed to excessive mental work. She improved with rest and treatment—viz., first salicylate of soda, and subsequently Fowler's solution—up till Sept. 3rd, when, under the agitation caused by the conduct of a patient in a neighboring bed, she fell into a state of furious excitement. Her movements became incessant and maniacal in character, so violent that she was constantly being thrown out of bed, and had to be tied down with boards let in at the sides. She seemed conscious all the while and to understand what was said; she obviously, for instance, tried to answer questions, but could not frame the words. She was at once isolated, and at night chloral, at first combined with bromide of potassium, was given in fifteen doses of each, the arsenic being continued during the day. On the night of Sept. 4th I gave her thirty grains of each without producing any sleep, and increased it to forty on the night of the fifth with equally little effect. On Sept. 6th, as she was becoming completely worn out, and had had no sleep since Sept. 3rd, while it was obvious that if the movements were not in some way checked she must, sooner or later, die, I administered chloroform. She was kept under for several hours, but when she came round was as bad as ever. It was then determined to make a systematic attempt to chloralize her, and for the next four days doses were administered at frequent intervals, according to the results produced. It was given not so much with the intention of producing sleep as with that of checking the movements. She was, of course, under careful observation, special attention being paid to the temperature and the state of the pulse. The quantity given at each dose, and the intervals between the doses, were left to the judgment of the resident officer in charge at any given time; for instance, she was never roused from sleep except to be fed, and, if one dose was ineffectual, another was given within the hour. Acting on this method, within a few hours from the time that chloralization was begun on the night of Sept. 6th, she was got under the influence of the drug and kept more or less so for the next four days, the quantity required to produce the effect being altogether about a hundred grains daily. She was fed by the mouth when possible, but enemata of milk, eggs, and brandy were frequently administered also. During the height of the attack her temperature rose to about 103° and kept at that level with slight fluctuations. This was probably due to the waking up of the rheumatism she had suffered from in the beginning, because she exhibited signs of pain and tenderness in the ankles, though there was no swelling there, and because at this time, and not till then, a very loud systolic murmur was to be heard at the apex, which could be heard up to the date of her discharge. It is worthy of remark that the chloral had no perceptible effect on the temperature. By Sept. 11th the violent movements had entirely disappeared and she would sleep for hours after the administration of one dose of ten grains. She had gained ground so far that the choreic movements were decidedly less marked than they were just before this acute exacerbation. The probability, indeed, is that if the chloral had been further pushed a few days more she would have been entirely cured of chorea. But, reduced as she was, in the absence of urgent symptoms, and bearing in mind the cardiac mischief, it was considered better to reduce the quantity of the drug and substitute tonic treatment as soon as possible. From the result of this case it seems probable

that we could—at the expenditure, it is true, of considerable trouble—reduce very materially the length of time spent in the cure (or watching rather, for it is surely doubtful whether the patient recovers any the sooner for the exhibition of the drugs ordinarily used) of cases of chorea.—*B. Baskett, M.R.C.S., etc., in London Lancet.*

IN PRAISE OF GOUT.—"I shall be happy to hear that my friend Joseph has recovered entirely from his late indisposition, which I am informed was gout; a distemper which, however painful in itself, brings at least some comfort with it, both for the patient and those who love him, the hope of length of days, and an exemption from numerous other evils. I wish him just so much of it as may serve for a confirmation of this hope, and not one twinge more."

The above quotation is from one of Cowper's letters, and well expresses the popular creed as to gout which was entertained during the eighteenth century. Since then we have become acquainted with granular kidneys and degenerate arteries, and our views as to the significance of podagra have received some modification. It may be suspected, however, that in this matter medical opinion has advanced faster than that of our patients. Many of the latter probably still share the believe of our good social poet. It may be suspected, too, that after all there was much truth in the old creed, and that to have gout is not in itself a bad omen in reference to longevity. Many gouty persons are undoubtedly to a large extent free from other maladies. They are persons who, as a rule, avoid and escape most of the diseases incident to low tone. They live up to their digestive powers, and do not so easily succumb to debilitating influences as some who adopt more abstemious habits. It must be remembered, too, that they usually come of good stock, and that their predecessors for some generations have been of vigorous stamina, and accustomed to live liberally. It is better to have a tendency to gout than to verge towards scrofula, anæmia, or neurasthenia, and to a large extent (though not absolutely) the one does exclude the others. If the man who has had an attack of gout will only allow it to serve as a warning, and henceforth select his wine with judgment, avoid all fruit, take plenty of salt, keep his bowels open, and never neglect exercise, it is probably still true that he has before him "the hope of length of days, and an exemption from numerous other evils."—*Jonathan Hutchinson in Archives of Surgery.*

SENILE HYPERTROPHY OF ARTERIES IN A TOTAL ABSTAINER WITHOUT CALCAREOUS CHANGES.—A case which in some respects I may contrast with the preceding one was that of a gentleman, aged seventy-two, who had been a total abstainer all his life. I was consulted on account of strangulated hernia, and was warned by his medical attendant that he had extensive disease of his heart and arteries, and would be a bad subject for chloroform. Notwithstanding this, as the anæsthetic was needed, we at once administered it, and he took it quietly, without the slightest undue disturbance of his circulation. The statement as to his pulse, however, was quite correct, for he had a most extraordinary condition of senile enlargement of his arteries. They were neither tortuous nor calcareous, but simply enlarged and thickened. His radial of both wrists felt almost as large as a cedar pencil, and beat vigorously. There was an intermission at every six beats. So far as I examined him I believe that the enlargement of the arteries was general, although not to so great an extent in other parts as in the radial. There was no murmur in connection with the heart, but it was probably somewhat enlarged. If we now ask as to the influence of this state of the arterial system on the patient's health, I have to record that its subject was a man who might be considered an example of perfect senile vigor. He was tall, thin, and florid, with a beautifully clear complexion, and not the slightest trace of duskiness. I believe he had never suffered from any discomfort at his heart. He was accustomed to take a daily journey from the suburbs to his business place in the city, and he could walk well. His boast was that until his present illness he had never spent a day in bed.

This case may be considered to prove that senile hypertrophy of arteries is not in any way secondary to other disease, that it has no connection with the use of alcohol, and is not necessarily attended by any inconveniences.—*Jonathan Hutchinson in Archives of Surgery.*

LADIES' DRESSES AND CONTAGION. — We have already had occasion to notice the supposed influence of the trains of ladies' dresses in spreading contagion. The matter has been warmly taken up in Vienna and Pesth, and we now learn that a regular crusade has been instituted by the Sanitary Board of Hungary against the obnoxious fashion. It is not to be expected that the justice of this course will pass unquestioned. By very many persons it will certainly be regarded as an instance of the mere enthusiasm of sanitation, having but the slightest foundation in reason or science, and as little connection with practical cleanliness. There is some room for argument on both sides, nevertheless. Granted that the germs of disease abound in a given quarter, no ordinary means could more effectually ensure their dispersion than the broom-like action of a flowing skirt. On the other hand, it is to be remembered that this very movement implies an admixture of air and oxygenation of the dust cloud. Then, again, one is tempted to inquire whether a reduction of the length of train is the best method of dealing with this question of germ dispersion by means of street dust. Would it not be better, in combating whatever contagion may linger among its particles, in spite of a purer surrounding air and sunlight, to rely upon the sanitary water-cart or hose and the scavenger's brush? If dress fashions are to be held responsible and forbidden, are the whirl of traffic and the bustle of hurrying pedestrians, though they wear no trailing robe, to be restrained also? We admit a cordial dislike to this latter garment, both on account of its close and clinging unwholesomeness as regards the wearer and on the ground of its public inconvenience. Nevertheless, the surest remedy for infection by means of dust is, in our opinion, rather to be sought in the cleansing of thoroughfares than in the restraint of fashions in dress.—*Lancet.*

FRACTURE OF THE HYOID BONE.—On Wednesday afternoon Mrs. C., æt. 25, called and wished me to treat her throat, saying that it was sore. She could then speak only in a whisper. In my examination I found the pharynx swollen and congested, and as the tongue was depressed it caused severe pain and suffocation. Externally over the hyoid there was marked ecchymosis. She confessed that on Monday evening, this being Wednesday, when in a quarrel with her husband, he had grabbed her by the throat and choked her twice. The first time he did not exert much force; then, renewing his attack the same as before, he choked her until suddenly she experienced a very severe pain and fainted. She was put to bed, and during the night she suffered extremely from suffocation, deglutition being very difficult. On Tuesday she felt a little better, but could only take liquid food, and even that she thought would suffocate her. That night she was about the same, but grew worse on Wednesday, and then consulted me. The swelling was so great that I could not determine the exact condition at that time, so prescribed Slevin's inhalation and poultices to the neck; this reduced the swelling so that on Thursday, by having an assistant hold the tongue out as far as possible, pressing my finger down the throat, compressing externally, I could distinctly feel the fracture of the greater cornua, near the attachment of the hyoglossus, all the pain and tenderness being at this point. I asked for a consultation, which was granted; the consultant agreed with me in my diagnosis. Will report the result and treatment later.—*A. L. Sherman, M.D., in Times and Register.*

A CURIOUS RESULT OF AN OPERATION FOR CONGENITAL HERNIA.—The contents of hernial sacs as revealed by operation are of the most varied description, but a remarkable surprise in this respect was the result of surgical interference undertaken by Jules Bœckel, of Strasburg, the other day, for the relief of a congenital hernia. The patient was a young man, æt. 20, for whose condition it was suggested to perform the radical cure. In the course of the operation the hernial sac was found to be empty equally with the inguinal canal. But to the posterior wall of the sac was attached a triangular-shaped body; this was drawn outwards and removed and the skin wound closed. Convalescence was established at the end of ten days. On a subsequent examination of the part removed the following curious facts were revealed: There was a double-horned uterus, the cavity of which was lined with ciliated epithelium; a Fallopian tube and a testicle with the epididy-

mis and vas deferens; a large ligament enclosing and supporting these two organs. The patient in other respects was a well-formed man, despite the fact that he was born with a uterus. —*Medical Press.*

THE COBWEB AS A STYPTIC.—When Bottom was "translated" and introduced to the attendants of Titania, he endeavored to ingratiate himself with Good Master Cobweb by saying, "When I cut my finger I will make bold with you." To arrest bleeding the application of a cobweb to the wound has long been a rural custom. Experience has shown that the gossamer of which the web is composed forms a very useful styptic; but a very fatal objection to its use arises from the fact that as an application to an open wound it can never be guaranteed to be surgically clean, forming, as it does, a net for insects, and at the same time for the germs of many an infectious disease. Evidence of this was produced before the Liverpool coroner recently touching the death of Martha Roberts, who, following the time-honored custom, had applied a cobweb to her wounded hand to stop the bleeding. Blood poisoning followed upon its application, and this terminated, unhappily, in a fatal issue. It is not a solitary case. The principles of asepticism have not yet become part of the intellectual equipment of the people, neither have its lessons succeeded in overcoming prejudice.—*Lancet.*

A CURIOUS PATIENT.—As good an instance of surgical wit as can be found is still told about the staff of one of this city's hospitals. A dangerous operation was being performed upon a woman. Old Dr. A——, a quaint German, full of kindly wit and professional enthusiasm, had several younger doctors with him. One of them was administering the ether. He became so interested in the old doctor's work that he withdrew the cone from the patient's nostrils, and she half roused and rose to a sitting posture, looking with wild-eyed amazement over the surroundings. It was a critical period, and Dr. A —— did not want to be interrupted. "Lay down dere, voman," he commanded, gruffly. "You haf more curiosity as a medical student." She lay down, and the operation went on.—*N. Y. Medical Record.*

THE
Canadian Practitioner
A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

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HIGHER EDUCATION FOR WOMEN.

Is it possible, in our schools, to give too much encouragement to girls who contemplate a course of, what we are accustomed to call, higher education? Are women equally fitted with men to enter the learned professions, and to compete with them in the various employments of life hitherto solely occupied by men? It may be thought that these questions have long ago been definitely settled, and there is no more to be said in objection to the great "advance" which has of late years been made in the facilities afforded for the education of girls and women. It is well, occasionally, to pause and calmly consider the opposite side of a question when we find ourselves being carried on by the current of popular enthusiasm. An article appears in the *Lancet* which will excite a great deal of interest and criticism. It is an oration on "Sex in Education," delivered at the Medical Society of London by Sir James Crichton-Browne, M.D. He considers the tendency is unphysiological of ignoring intellectual distinctions between the sexes, of assimilating the education of girls to that of boys, of throwing men and women into industrial competition in every walk of life, and of making them compeers in social intercourse and political privileges; he thinks this tendency likely to lead to most disastrous results.

Dr. Crichton-Browne, at the outset, proceeds to trace out several bodily differences between the sexes. He deals more particularly with differences in the brain. After studying the results of an extensive investigation, he states that "all available evidence points to the conclusion that

the male brain exceeds the female brain in weight in this country to an even greater degree than has been hitherto supposed." The same differences in brain weight have been found in savage races. He quotes Broca in stating that the occipital lobes are more voluminous than in the male; the occipital lobes being, in his opinion, certainly sensory in their functions, whilst the motor areas of Ferrier in the parietal lobe are larger in the male than in the female. There is a superior symmetry of the female brain, due to the comparative poverty of secondary gyri. The specific gravity of the grey matter in every lobe of the brain in the female was lower (in a number of cases examined) than in the male. That the grey matter is of less density is probably due to the fact that it is less highly nourished in the female. Some interesting facts with regard to the vascular supply of the brain have recently been elicited by experiments by Dr. Crichton-Browne and Dr. Sydney Martin; the anterior portion of the brain is comparatively more copiously irrigated with blood in men and the posterior region in women. "The region of the brain which in men is most richly flushed with blood is that which is concerned, we have reason to believe, in volition, cognitions, and ideo-motor processes; while the region which in women is most vascular is that which is mainly concerned in sensory functions. There is a relation between the size of the cerebral arteries and what observation has taught us as to the intellectual and emotional differences between the sexes." We are reminded that all through life the male brain differs from the female in "capacities, aptitudes, and powers." Differences early assert themselves. Thus Thackery has said that little girls make love in the nursery and practise the arts of coquetry on the page boy who brings the coals upstairs; and as for the page boy, it is certain that his pugnacious propensities are already fully developed, and have brought him into conflict with his brother buttons. And differences are most patent of all in the prime of life, when man, "for contemplation and for valor formed," by "his fair large front and eye sublime" declares "absolute rule," and when woman, "grace in her steps, heaven in her eye, in every gesture dignity and love," stands conspicuous for "softness and sweet, attractive grace." And differences subsist to the last. The aged spinster left in "maiden meditation fancy free" lavishes her altruistic emotions on cat, poodle, or parrot; and the hoary veteran, fidgety and irascible, concentrates his egotistic attention on his own liver; and these differences in brain structure and function, which at every stage of existence separate the sexes, have a special pathological significance at the period when sexual divergence is taking place most rapidly, and when education is being pushed forward with most vigor.

Before the high school era dawned in England girls lived and learned and reasoned in a way, and in introducing them to the higher erudition these schools have withdrawn them to a large extent from homely household occupations, which were not without their educational value, and have substituted the dogmatic teaching of the hireling for the precept and example of the mother. Dr. Crichton-Browne remarks that if the high schools are faithful to prepare their pupils to become efficient wives and mothers, they should add housewifery in all its branches to their present curriculum. Four years ago the author of the article in question met, in the country, a high school girl who was reading Lucretius for her recreation, but she failed lamentably in the task prescribed of boiling a potato. "Now," Dr. Browne adds, "I am sure much more of the happiness and wholesomeness of life hinges on the boiling of potatoes than on the interpretation of Lucretius and his dark and doubtful sayings." In criticising an authority on overwork he says: "I read some time ago a paper by a distinguished authority on educational subjects, Dr. Emily Bryant, in which she argued that it is impossible to overwork girls, their inherent indolence and frivolity being proof against any stimulus that can be applied to them. Well, I would answer Dr. Emily Bryant that it is possible to overwork horses—witness splint, curb, thorough pin, and back sinew—and surely girls are not more obdurate than horses."

A most interesting and suggestive part of the paper deals with an investigation carried on concerning the health of high school girls in England. We find that of 187 girls belonging to the upper and middle classes, well fed and

cared for, and ranging from ten to seventeen years of age, as many as 137 complained of headaches. Sir Richard Owen once stated that "children have no business with headaches at all, and, if you find that these occur frequently in any school, you may depend on it there is something wrong there." And so there must be something radically wrong in high schools that produce so copious a crop of cephalagia. Again, a train of nervous disorders are said to arise from the same source. Thus the mental failure which follows upon severe overpressure and may be summed up as acute or apathetic dementia is an instance. "But besides apathetic dementia there are, of course, many other mental aberrations to which overpressure may lead up, the nature of these, in each case, being determined by the inherited tendencies, antecedents, or environments of the girl. We may have cyclones of mania or anticyclones of melancholia, hurricanes of morbid influences or the settled bad weather of moral perversion. And as regards certain minor mental changes which thus arise, it is noteworthy that they are often concealed by girls who do not comprehend and can scarcely describe them. This is particularly the case with reference to those voluminous mental states described by Dr. Hughlings Jackson which are sometimes the harbingers of epilepsy."

In addition, these victims of higher education are said to labor under a gastric disorder now so common that it might receive a distinctive appellation and be called *anorexia scholastica*, in which the lessened flow of energy from the exhausted nerve centres retards the functions of all the abdominal viscera.

Dr. Crichton-Browne warns us that the headachy girl is not unlikely to grow into the migrainous and invalid woman. A voluminous mental state may develop into epilepsy; somnambulism may lead to hysteria; insomnia lay the foundation of insanity; and anæmia at the growth period may entail lifelong debility. Overpressure operates on the high school girl at a great epoch of her life—at puberty, and during the pre- and post-pubertal periods—when momentous changes are taking place in her body and mind, and when a wave of irritability sweeps through her nervous system. The grand truth to be inculcated in all high school authorities is this: That they have to deal with girls at a period in life when vital resistance is greatly reduced, when the liability to disease is proportionately augmented, and when physiological indiscretions are peculiarly hazardous. One of the remote evils of overpressure in girls will be the propagation of phthisis in those who have been subjected to that overpressure. The indoor life of the girls, their sedentary habits, and the stooping posture in which they pass much of their time bring the lungs into a state that is favorable to tuberculous infection. The lungs are comparatively immobile, and there is consequent inactivity of the respiratory current in them, with a tendency to congestion and catarrh. Chorea, also, we are told, is a malady which, perhaps more than any other, may be directly attributed to overpressure and nervous strain."

The author of the article states that "Five men suffer from the motor form of writer's cramp for every one woman who so suffers, and the explanation of this lies on the surface, in the fact that men are employed in writing far more numerously than women. Four men die of general paralysis of the insane for every one woman who so dies. Is it not feasible to suppose, then, that women owe their comparatively small liability to this fell malady to their comparative freedom from the stress and striving of professional and business life which so often lead up to it in men? To make women katabolic—and that is, Dr. Browne maintains, what high school education tends to do; to throw them into competition with men—and that is what some high school education aims at—is to ensure them a largely increased liability to organic nervous disease. And so overpressure from ten to seventeen years of age may have amongst its remote consequences not only the reproduction, in the same or modified forms, of the functional nervous disorders which so often manifest themselves at that period, but a crop of gross nervous degenerations which have, up to this time, been rarely seen in women; and, notwithstanding all Wiedemann's arguments, Dr. Browne remarks: 'Woe betide the generation that springs from mothers amongst whom gross nervous degenerations abound.'"

In discussing the action of one of the Scotch universities in opening its class rooms to

women, Dr. Crichton-Browne states: "I must, however, even now express my belief that the University of St. Andrews, in deciding, as it has lately done, to open all its classes in Arts, Science, and Theology, to women as well as men, has taken, not a retrograde step—for our ancestors never did anything so foolish—but a downhill step towards confusion and disaster. Its now empty benches may be thronged with pupils, its professors may fatten for a time on duplex fees; but the attempt to educate young men and women, not only on the same lines, but in the same coaches, cannot but prove injurious to both. 'What was decided amongst the prehistoric protozoa cannot,' it has been well said, 'be annulled by Act of Parliament, and the essential difference between male and female cannot be obliterated at a stroke of the pen by any senatus academicus. To essay such work is to fly in the face of evolution."

In summing up the evidence advanced, Dr. Browne concludes his interesting paper as follows: "With this divergent differentiation of the sexes has come more reciprocal dependence and higher harmony. It is no question of superiority or inferiority of the one sex to the other. Each sex is higher, each is lower; together they make up the perfect whole, separate they are infirm; in union they are strong, in competition they are mutually destructive. It is in the sympathetic accord of the differentiated sexes that human progress can alone be hoped for. Men and women are constitutionally adapted to different work in the world. To set them to do the same work is wasteful and detrimental to the sex that is less adapted to it. It is impossible to contemplate with complacency some of the experiments in this direction which are being carried out, and it is impossible to speculate, from a medical point of view, without apprehension, what the outcome of such experiments may be, or what high school and college and hall education may do for the country in a few generations if they be pushed on with relentless zeal."

THE THERAPEUTIC VALUE OF LILY OF THE VALLEY.

For some years past there have been occasional magazine and other fugitive articles about this drug, so well known as a plant, but so little known and used as a drug. Its Linnæan name is *Convallaria majalis;* N.O., Liliaceæ; part used, the whole plant, or any part of it; preparations differing, as we shall see, in properties according as the flowers, stems, or rhizomes and rootlets are used; habitat, the temperate northern hemisphere; wild and cultivated. The Caucasus is particularly rich in the plant, and it has been long in use in southern Russia among the peasantry. Clinical observation has been amassing upon it, so that a reliable statement may be made of its value and use.

Its active principles are two, at least the important ones: *Convallarin*, a glucoside, crystalline and acrid, residing chiefly in the stem, rhizome, and rootlets, and a strong emetic and cathartic; and *Convallamarin*, also a glucoside, bitter and amorphous, found chiefly in the flowers, and a valuable cardiac stimulant and diuretic. This statement is very important, as its bearing upon the relation between the preparation used and the result attained is at once evident. By far the more important of the two is the latter, clinical experience not having given the former any prominence as an emetic and cathartic better than those in ordinary use.

The preparation, then, that should be employed is an alcoholic tincture of the flowers, 4 ozs. of flowers to the pint of dilute alcohol, in doses of 20 to 30 m.; or the fluid extract of the flowers, that made by Parke, Davis & Co., of Detroit, being hitherto most reliable, given in doses of 5 drops three times a day up to 20 or 30 m. every four hours or more. Other preparations are fluid extract of the herb and fluid extract of the root, not likely to be of such service for the reason given above; pill of convallamarin $\frac{1}{12}$ gr., and tablet triturate convallamarin, $\frac{1}{60}$ gr.

Points of interest in its dosage are that it has no cumulative effect, and that smaller doses, of the size stated above, have vascular and cardiac sedative and diuretic effects quite equal to those of much larger doses, even half a fluid ounce at a time. It is to be noted, too, that idiosyncrasy is to be guarded against, small initial doses being employed.

Physiological experiment has shown, in both warm and cold-blooded animals, that the cardiac contractions are retarded, with an increase

in their energy and in blood pressure. In warm-blooded animals this retardation is followed by markedly accelerated contractions and still higher blood pressure, the heart finally being arrested in systole, as in digitalis poisoning, and the blood pressure falling.

This statement naturally leads to a comparison of convallaria and digitalis. As regards their diuretic effect, they are both cardiac diuretics, the advantage lying with convallaria in that it has no cumulative effect, and that diuresis, if established, lasts some days, four or five, without the continuance of the drug. When heroic doses are necessary, convallaria may be given more safely than digitalis. It has the great additional advantage of not causing gastric disturbance. That state of the renal epithelium which causes albuminuria hinders its diuretic action. As regards the stimulant effect of the two drugs on the heart-muscle, authorities such as Sée and Dujardin-Beaumetz give convallaria the first place, as it is not so dangerous in myotrophic changes in the heart, and acts as a powerful regulator of nervous function, both of the sympathetic and cerebro-spinal systems. Particularly in cardiac neuroses, such as palpitation, smoker's heart, the "irritable" heart of anæmia or hysteria, whether accompanied or not by organic change, it seems to be a most valuable therapeutic agent. Valvular lesions are notoriously accompanied by irritability in the patient, and a sense of comfort and *bien être* is secured in most cases very promptly and peevishness relieved.

Authorities are disagreed as to the value of convallaria over digitalis as a cardiac tonic in cases where the heart muscle is diseased; *e.g.*, in convalescence from acute disease, such as typhoid. The rule against digitalis in such cases is not yet established against convallaria, and Sée claims efficacy for it. The latter authority, as a result of many experiments on both animals and man, has summarized as follows:

"First: Convallaria majalis constitutes one of the most important cardiac remedies which we possess.

"Second: . . . Convallaria produces on the heart, blood vessels, and respiratory organs effects constant and constantly favorable, to wit: Slowing of the heart beats, with often a restoration of the normal rhythm, and, on the other hand, augmentation of the energy of the heart, also of the arterial pressure; in fine, the inspiratory force is increased and the *besoin de respirer* is less injurious, less painful.

"Third: The most powerful, constant, and useful effect is the abundant diuresis, which is, above all things, essential in the treatment of cardiac dropsies.

"Fourth: The therapeutic indications are summed up as follows:

"(*a*) In palpitation resulting from exhaustion of the pneumogastric nerves (cardiac paresis), the most frequent source of palpitations.

"(*b*) In simple cardiac arrhythmia, with or without hypertrophy, with or without lesions of the orifices or valves.

"(*c*) In mitral constriction, especially when it is accompanied by failure of compensation on the part of the left auricle and right ventricle; the contractile force augments visibly under the convallaria, as the sphygmograph testifies.

"(*d*) In mitral insufficiency, especially where there are pulmonary congestions, and when, as a consequence, there is dyspnœa, with or without nervous trouble of the respiratory apparatus.

"(*e*) In Corrigan's disease the peripheral arterial pulsations disappear, and respiration becomes markedly restored. In dilatation of the left ventricle without compensatory hypertrophy it restores energy to the heart, which tends to become more and more feeble and dilated.

"(*f*) In dilatations of the heart with or without hypertrophy, with or without fatty degeneration, with or without sclerosis of the muscular tissue, the indications for convallaria are clear.

"(*g*) In all cardiac affections indifferently, from the moment that watery infiltrations appear, the drug has an action evident, prompt, and certain.

"(*h*) In lesions with dyspnœa the effect is less marked. To combat cardiac dyspnœa, convallaria is inferior to morphine, and especially to iodine, but morphia suppresses the urine, and iodine is in every way preferable. The combination of iodide of potassium with convallaria in the treatment of cardiac asthma constitutes one of the most useful methods of treatment. Finally, in cardiopathies with dropsy, the convallaria surpasses all other remedies. One is often obliged to suspend the use

of digitalis on account of vomiting, digestive disturbances, cerebral excitation, the dilatation of the pupil which it so often produces after prolonged use. The final action of digitalis is exhaustion of the heart, increase with enfeeblement of the heart's pulsations, just the opposite effect from those we seek when we give the drug.

"Convallaria has no deleterious effects on the economy, and has no cumulative action."

Hospital Reports.

SEPARATION OF THE LOWER FEMORAL EPIPHYSIS.*

Under the care of A. Primrose, M.B., C.M. Edin., M.R.C.S. Eng., in the Hospital for Sick Children, Toronto.

Willie Macklin, æt. 13. At half-past seven o'clock on Thursday morning (Nov. 12th, 1891) he was trying to pass from one room to another by climbing out of one window and into another, the rooms being situated in the third storey of the house, 30 feet from the ground. He missed his footing and fell, falling on a driveway. His sister and mother went immediately to his assistance, and found him lying unconscious. He was carried into the house, and about half an hour after he became conscious. Dr. Primrose was sent for, and found the patient at 8.30 a.m., lying in bed, with the left leg flexed on the thigh, at an angle of 80°. The thigh was also flexed on the abdomen. There was perceptible swelling at the knee-joint. The boy complained of pain in the knee. There was a considerable amount of blood about the face. He had a cut in the lower lip 1½ inches long, through the entire thickness of the lip, ¾ of an inch below the free margin of the lip. He had knocked out the left upper central incisor tooth. He had a small wound in the right ala of the nose. Dr. Primrose examined the injured limb and concluded that a fracture existed, but could not determine the exact site; there was undoubtedly some implication of the knee-joint in the injury; the swelling within the synovial sac occurred immediately after the injury; it probably was filled with blood and serum. A long splint was applied, the limb first of all having been straightened by traction at the ankle. The splint extended from the foot to the axilla, and was secured by a leg-bandage, a spika at the hip, and a wide roller around the chest. Four stitches were put in the wound in the lip.

Dr. Primrose advised that the child be sent to the Children's Hospital. This was done, and he was admitted at 11 a.m. On admission, the child was put under chloroform and examined. The femur was carefully examined, but no fracture discovered by direct manipulation of the bone. The leg was then grasped above the ankle by one hand, and the other hand applied over the condyles of the femur. It was found that very marked movement occurred laterally at the condyles, at a point apparently just below the adductor tubercle on the inner side, and at a corresponding point on the outer side. The movement (although not carried out extensively) was very perceptible, the lower fragment rocking from side to side on the upper, producing at the same time soft crepitus. The patella, on being pressed back firmly against the femur, and on being rubbed from side to side, gave a very perceptible crepitus, a roughness which was well marked. (This fact was noted at the boy's home. It was found that there was no pain on manipulating the patella alone, but on pressing it back against the femur pain was elicited, and the roughness spoken of noted.) The swelling at the joint was very great. On careful measurement being taken from anterior superior spine to the internal malleolus, there was found to exist scarcely half an inch of shortening in the fractured limb. The limb was placed in good position and a long splint from the axilla to the ankle applied with extension 6 lbs., the limb being retained in an extended position.

Dec. 9th, 1891. There has been some irregularity of the temperature since admission. There has been nothing special to note in his condition. The swelling in the knee has been very obstinate, but is slowly diminishing.

Dec. 12th, 1891 (four weeks after the injury). Dr. Primrose removed the splints and attempted passive movement at the knee-joint. A very small amount of flexion was possible, through an angle of, say, 8°. This was not accomplished without considerable pain to the patient, and the breaking down of adhesions was perceptible, some giving way with a distinct crack. Directions were given to have passive movement

*A case presented at the Toronto Medical Society.

carried on daily, increasing, from time to time, the amount of flexion.

Feb. 6th, 1892. Passive movement has been carried out regularly; for the past five weeks he has been out of bed, rolling about the ward in a wheel-chair; latterly he has been walking with the aid of a stick. The splint was left off Dec. 27th, 1891, and he has not worn any fixation apparatus since.

The measurements from anterior superior spine to internal malleolus were: Left, 31½ inches; right, 32 inches. There was ½ inch of shortening on the affected side. Extension at the knee-joint was normal, and he could flex the leg so that the leg formed with the thigh an angle of 50°, or, in other words, the amount of flexion was through an angle of 130°. He was told to contine passive movement, and to increase still further, if possible, the amount of flexion.

The patient was discharged.

Remarks by Dr. Primrose: Separation of the lower epiphysis of the femur is not of common occurrence. When it occurs from extreme violence it becomes an injury which, as a rule, results in very disastrous consequences, and it is probable that the injury seldom or never occurs *in healthy subjects* unless the violence be extreme.

The patient I show you fell a distance of thirty feet, and, as the result, fractured the femur at the lower epiphysial line. It seems remarkable that the deformity resulting was not greater, and that the injury to the knee-joint and the surrounding soft parts was not more severe. If, in fact, the present instance exemplified the usual results of such an injury, we would be very much misled by the accounts given by authorities on fractures; thus in Hamilton's treatise on fractures and dislocations, we have recorded a number of cases illustrating the different conditions found associated with separation of the lower femoral epiphysis. I may briefly refer to these:

Case 1.—A boy of 11 years. The shaft of the femur was driven behind the condyles. The limb was amputated.

Case 2.—Fracture caused by traction on the foot in the act of birth. Child born dead.

Case 3.—Boy, æt. 18. Caused by violent blow on lower part of femur. Impossible to reduce the fracture. Gangrene ensued. Limb amputated on 5th day.

Case 4.—Boy, æt. 11. Compound. Amputation performed on 13th day.

Case 5.—Compound. Amputation.

Case 6.—Boy, æt. 9. Compound. Amputation.

Case 7.—Boy, æt. 12. Compound. Recovery ensued, with shortening of ¾ of an inch and anchylosis of knee-joint.

Hamilton, therefore, does not report any case which terminated in as favorable a fashion as that which I now present to you. The points worthy of note concerning my patient are:

(1) The violence was great, and the injury produced was one which seldom occurs without extreme violence; nevertheless the injury produced was restricted chiefly to the seat of fracture in the bone, and the joint and surrounding soft parts escaped in a manner quite unusual.

(2) The ease with which the deformity was reduced.

(3) The complete restoration of the function of the joint, and the small amount of deformity of the limb (*i.e.*, ½ inch of shortening).

CASE OF RENAL CALCULUS—NEPHROLITHOTOMY—RECOVERY.

Under the care of A. McPhedran, M.B., and I. H. Cameron, M.B., in Toronto General Hospital.

(REPORTED BY R. H. GOWLAND, M.B.)

Matthew B., æt. 24, teamster. Admitted into Toronto General Hospital, March 14th, 1892, under the care of Dr. McPhedran. At that time he complained chiefly of some failure of general health, of severe pain in the lumbar region, and he had a peculiar gait, walking quite lame and holding the right leg and thigh somewhat flexed.

Family History: Good.

Past History: Has always been a strong, healthy fellow of regular and temperate habits. Had typhoid fever ten years ago, but otherwise perfectly well until about two years ago, when, on lifting heavily, he felt a violent pain in the back. At next micturition urine was markedly bloody and the hemorrhage continued, gradually diminishing for four days, when it again appeared normal. Patient stopped work for three weeks, but suffered at irregular intervals from severe pain, which began in the right

lumbar region and ran along the course of the ureter to the testicle of the same side. The testicle retracted during a paroxysm of pain. At the end of the above time he felt somewhat better, and took a position as street-car driver, working steadily for seven months. During this time he was quite free from pain, and, thinking himself well, he returned to his former occupation. About six weeks later, however, the pain returned, with the same characteristics, but without any hemorrhage, and he was forced to leave work for a short time. After a few days he started work again and continued till spring, when he had a similar attack. He worked on till October, when he received a severe shaking up by the upsetting of a load of wood. Since this time pains have been more frequent and severe, and he has not worked steadily. In April, while ploughing, he had a second hemorrhage, lasting about three days, and since that time he has done no work. Medicinal treatment was tried by several physicians, but gave no relief. The paroxysms were usually relieved by hot fomentations, but towards the last these were useless.

Present Condition: Has a healthy appearance, but says he is considerably weaker than he was a year ago. The gait is peculiar, resembling, in some respects, that seen in morbus coxæ, but all the movements of hip-joint are free and painless, and the characteristic signs of joint disease are absent.

Urinary System: No pain on micturition; frequency normal; on deep abdominal palpation over the right kidney some tenderness can be observed, but no dilatation of pelvis or ureter.

Examination of Urine:

Gross: Quantity, normal; color, ditto; reaction, slightly acid; specific gravity, 1030; slight flocculent precipitate on standing.

Chemical: Trace of albumen, due to the presence of pus.

Microscopic: Pus cells; ten to fifteen in a field; oxalate of lime crystals about same number; red blood corpuscles, a few.

Nervous System: Does not sleep well on account of pain. When lying on left side he has a dragging sensation, and when on right a feeling of soreness. He also complains of considerable frontal headache and dimness of vision.

Alimentary System: Tongue slightly coated and appetite only fair; otherwise normal. Rectal analysis showed the prostate and vesiculæ seminales normal.

Dr. McPhedran pointed out that the symptoms were very typical. The seat and direction of the pain, the retraction of the testicle, the hæmaturia and pyuria, without the presence of mucus, taken with the other characters, are very significant, and from the abundance of oxalate of lime crystals it is fair to judge that the calculus is composed of oxalate of lime; the severity of the pain would also indicate that. It must not be forgotten that the pain is not necessarily referred to the side on which the calculus is located.

The diagnosis of calculus of the right kidney seemed so clear that the patient was referred to Dr. I. H. Cameron for operation, and on March 26th Dr. Cameron, assisted by Dr. Primrose, made a lateral lumbar incision exposing the kidney. On palpation nothing abnormal could be felt. A needle was then introduced, and, after some search, the point came down on a substance giving a clear click and a firm feeling of resistance. A limited incision was made in the kidney substance over the position of the stone and forceps applied, but it was only with great difficulty that it could be dislodged. It was firmly imbedded in the kidney structure towards its upper extremity, and projected partly into the pelvis, the projecting part being covered with the mucous lining of the part. When removed it weighed sixty-two grains, had a distinct capsule which came away with it, and, as would be expected from the urinalysis, was composed of oxalate of lime.

Further examination revealed no more calculi. The wound was flushed with sterilized water at 110° F., a drainage tube inserted, and the wound closed by superficial sutures. A dressing of iodoform, with Keith's preparation (carbolic acid, 1 part; glycerine, 7 parts), and large pads of absorbent gauze were applied, and the patient sent to bed.

The shock of the operation was considerable, requiring free use of spiritus vini gallici and 1/8 grain of strychnia hypodermically. For two or three days urine discharged freely from the drainage tube, but from this time it rapidly diminished, and at the end of a week scarcely

any escaped. There continued for considerable time a purulent discharge. The absorbent pads were changed as soon as any moisture appeared (about every six hours at first). The urine passed per urethra contained blood and pus, showing that the ureter and pelvis were free.

The patient is now quite well, and since the operation has had no attack of the characteristic pain.

Correspondence.

Editor of THE CANADIAN PRACTITIONER :

Again I must beg of you to assist me in refuting statements made by Dr. Benson regarding my views on diphtheria (CANADIAN PRACTITIONER, Feb. 1st and May 2nd, 1892). In my first answer, printed in your esteemed journal March 16th, 1892, I plainly showed that the above-mentioned gentleman had attacked "the disciples of the local-origin theory of diphtheria" for statements they never made, but which originated in the mind of Dr. Benson. Instead of taking warning through this reply, which was only intended to correct wrong statements regarding my views, and not for entering into a discussion which we then and there termed useless, Dr. Benson again tells your readers and myself that "Dr. Seibert's theory is that there is first an inflammation and secondly an exudation, so that the disease actually existed before the exudation appears by which the disease is recognized."

(1) Dr. Seibert never said this, no more than he would say that a wood fire could first burn without smoke, while in reality we have both fire and smoke within the same second.

(2) Dr. Seibert never had the audacity to advance any theory of his own regarding the pathology of diphtheria, but freely confesses that no amount of ink-wasting could induce him to think Dr. Benson, in Chatham, correct, and Klebs, Lœffler, Oertel, and Heubner all wrong.

(3) Dr. Seibert does not want to answer questions which can only be answered by a careful study of the wonderful work of the above-mentioned scientists; he simply asks not to be cited in the misleading and erroneous manner that Dr. Benson made use of.

(4) Dr. Seibert does not expect any one to try his submembranous local treatment of pharyngeal diphtheria with the chlorine water syringe devised for that purpose who is not even acquainted with the rudimental portions of modern diphtheria pathology, for this treatment is based upon these facts, but he does deem it unscientific and unfair to attempt criticism without a fair trial.

G. SEIBERT, M.D.

New York, May 14th, 1892.

Editor of THE CANADIAN PRACTITIONER.

There having appeared in the *Templar* of March 31st last, a paper published in Hamilton, and the organ of the Royal Templars in Canada, a portrait and laudatory notice of myself, containing statements that are a gross violation of good taste and professional ethics, I am required by the Council of the Toronto Medical Society to repudiate, through the medical journals of Toronto, all connection with the parts of the article which deal with me in a professional capacity.

Having been one of the organizers of the order in this country, and having held office continuously for seven years, the editor of the paper had often asked permission to publish my portrait, accompanied by a short biographical sketch. This permission I had refused until a few months ago, when the editor urged it, reminding me that a similar course had been taken with nearly all the officers of the society. I unadvisedly consented, and did not take the precaution to see the biographical sketch before it was published. Having worked with and been known to the editor during those years, he was quite conversant with my history, and penned the exaggerated statement on his own responsibility.

In reply to a note from me complaining of the statements made, he sent me the following:

HAMILTON, April 28th, 1892.

DR. B. E. MCKENZIE, Toronto, Ont.:

DEAR SIR AND BROTHER,—Replying to yours of the 26th April, I desire to express my sincere sorrow if any blunder or mistake of mine has placed you in an unfavorable position before the profession. I am very sorry now that I did not consult you with regard to the brief sketch before it was published. Newspaper men easily fall into a hurried, reckless way of slashing off matter of this kind without any thought of the technical etiquette of any society or profession.

I make herewith the emphatic statement that you had no knowledge whatever of the character of text which accompanied your portrait, and that it was written without any consultation whatever with you. We took the liberty to deal with you as we did with other officers of our association, looking at the matter purely from a society standpoint, with the desire of presenting you to your brethren in the most favorable light.

Yours fraternally,

W. W. BUCHANAN.

No other person can regret so keenly as I do the publication of statements such as those referred to above.

Yours very truly,

B. E. MCKENZIE.

Toronto, May 19th, 1892.

Book Reviews.

A Text-book of the Practice of Medicine, for the use of students and practitioners. By R. C. M. Page, M.D., author of "A Chart of Physical Signs of Diseases of the Chest," etc., Professor of General Medicine and Diseases of the Chest in the New York Policlinic, etc. New York: Wm. Wood & Co., 1892.

As the title and preface of this addition to medical literature indicate, it is a students' manual, 557 pages, with index and blank pages added for memoranda. As a text-book in medicine it seems, for compendiousness and condensation, quite comparable to Walsham's text-book on surgery. The letterpress, binding, and paper are quite up to the publishers' usual good standard, but room has been rather too rigidly economized in the spacing, heading, and paragraphing. Beginners in inductive study need all the education in the line of systematizing their work that can be given by the careful use of bold-faced type or italics in the proper places. There is no attempt at this, and no numbering of heads and sub-heads in discussing the various points of information regarding each disease. In this matter the book seems deficient. The classification of diseases is modern, and the discussion of each brief, especially as regards pathology, fuller as regards treatment than most texts, even prescriptions being given in some cases. In some of these the author betrays rather slipshod Latinity; *e.g.*, "Sig. ℥j ter die before or after meals," a hybrid combination of Latin and English that is not the best proof of high scholarship. The book has, on the whole, more merit than such compendious treatises usually possess, is modern and scientific in pathology, diagnosis, and treatment, and should be of service to the student, but scarcely to the practitioner.

A System of Practical Therapeutics. Edited by H. A. Hare, M.D., Prof. of Mat. Medica and Therapeutics in Jefferson Medical College, of Philadelphia, assisted by Walter Christie, M.D., formerly Instructor in Physical Diagnosis in the University of Pennsylvania. Vol. II. Philadelphia: Lea Brothers & Co., 1892.

The second volume of this system of therapeutics proves even more interesting and valuable than the first, dealing, as it does, with the treatment of those diseases most commonly met with in general practice. Syphilis, scarlet fever, typhoid, malaria, diphtheria, asthma, bronchitis, whooping cough, pneumonia, pleurisy, and empyema; diseases of the heart, blood vessels, and blood; diseases of the liver, gall bladder, stomach, are some of the subjects dealt with. The article on "Peritonitis and Appendicitis," by Roswell Park, and that on the "Diseases of the Rectum and Anus," by Charles B. Kelsey, will be found particularly useful.

The Pocket Pharmacy, with therapeutic index. A résume of the clinical application of remedies, adapted to the pocket case, for the treatment of emergencies and acute diseases. By John Aulde, M.D. New York: D. Appleton & Co., 1892.

The author announces that "this small brochure is in the nature of a plea for small doses, to be administered in accordance with physiological deductions, and is the outgrowth of personal experience in general practice." Dr. Aulde is known chiefly for his roseate advocacy of arsenite of copper in the diarrhœas of children. May his pocket pharmacy obtain a more enduring fame than his arsenite!

The Medical Annual and Practitioner's Index. A work of reference for medical practitioners. 1892. $2. Bristol: J. Wright & Co. Toronto: J. A. Carveth & Co., 413 Parliament street.

This excellent annual makes its tenth appearance in a volume of increased size and value. Many physicians feel the need of some

work which shall keep them *au fait* with the advances in all the branches of medical science, yet they scarcely feel like taking so bulky a work as the yearly five volumes of Sajou's "Annual of the Medical Sciences." To such we can heartily recommend the "Medical Annual."

Pamphlets and Reprints.

Age of the Domestic Animals: Being a complete treatise on the dentition of the horse, ox, sheep, hog, and dog, and of the various other means of determining the age of these animals. By R. S. Huidekoper, M.D., Professor of Sanitary Medicine and Veterinary Jurisprudence, American Veterinary College, New York; late Dean of the Veterinary Department, University of Pennsylvania. Philadelphia and London: F. A. Davis, 1891.

Mme. Lachapelle, Midwife. By Hunter Robb, M.D., resident Gynecologist to the Johns Hopkins Hospital. Johns Hopkins Hospital Bulletin No. 18, 1891.

Action and Application of the Faradic Current in Gynecology. By A. H. Goelet, M.D. Reprinted from the *Times and Register*, Nov. 7th, 1891.

Intestinal Anastomosis and Suturing. By Robt. Abbé, M.D., Professor of Surgery to Post-Graduate School, of New York. Reprinted from *Medical Record*, April 2nd, 1892.

Cases of Gall Bladder Surgery. By Robert Abbé, M.D. Reprinted from *New York Medical Journal*, Jan. 30th, 1892.

Conservative Treatment of Inflammatory Diseases of the Uterine Appendages and Sequelæ by Electricity. By A. H. Goelet, M.D. Reprinted from *Annals of Gynecology*, Boston, Feb., 1890.

Personal.

DR. THIRD, of the Toronto General Hospital House Staff, has been very seriously ill with facial erysipelas. Grave fears were entertained for his recovery, but he is now apparently mending. His many friends join in wishing him a safe and speedy convalescence.

Therapeutic Notes.

THE BEST DISINFECTANTS.—The Health Department of the city of New York has contributed much towards a proper understanding of the uses of disinfectants, and the following summary of the results recently determined by this department, as showing the relative value of the below-named germicidal chemicals, may be relied upon as accurate and conclusive. The germ-destroying power of the several agents was tested on the ordinary bacteria of putrefaction. They ranked in effectiveness in the following order:

Corrosive sublimate, 64 grains to the gallon.
Carbolic acid, 5 per cent. solution.
Bromine, 1 lb. to 200 gallons.
Permanganate of potash, 17¾ ounces to 200 gallons.
Chloride of lime, 4 ounces to the gallon.
Sulphate of iron, 1½ lbs. to the gallon.
Sulphate of zinc, 4 ounces to the gallon.
Common salt, 2 ounces to the gallon.—*Thomas J. Keenan in American Druggist.—Doctors' Weekly.*

FETID PERSPIRING FEET.—Dr. Bordet gives the following formula:

℞.—French chalk . . 40 parts
Subnitrate of bismuth . 45 "
Permanganate of potassium 13 "
Salicylate of sodium . . 2 "

M. This powder should be dusted daily into the stockings. The feet should be washed every morning and evening, and after washing rubbed with alcohol.

The method of treatment recommended by Unna is as follows:

℞.—Ichthyol . . . 5 parts
Turpentine . . . 5 "
Zinc ointment . . 10 "

—*Doctors' Weekly.*

TREATMENT OF CYSTITIS BY OXALIC ACID.—Dr. Renaud (*Le Bulletin Médical*, No. 12, 1892) has used oxalic acid for a long time in the treatment of cystitis with satisfactory results. He employs the following formula:

℞.—Oxalic acid . . gr. xv.
Syrup of orange peel . fl. ℥j.
Distilled water . . fl. ℥iv.

A soup-spoonful every two days.—*Lancet Clinic.*

CHLORAL IN THE TREATMENT OF FURUNCLES.—A tampon saturated with the following mixture is said to be useful in the treatment of this affection:

℞.—Chloral . . 10 grammes
Aquæ.
Glycerine, *aa.* . . 20 grammes
—*Journ. of Cut. and Genito-Urinary Diseases.*

FOR HEMORRHOIDS.—

℞.—Atropinæ sulphat . . gr. iv.
Acid. tannic . . . gr. vj.
Morphinæ sulphat . . gr. vj.
Cocainæ hydrochlorat . . ʒ ss.
Vaselin . . . . ʒj.
M. et ft. ung.

Sig.—Apply a small quantity to the hemorrhoid after each stool.—*Rev. de Ther. Gen.*—*Doctors' Weekly.*

GLYCERIN FOR BURNS.—"According to Dr. Grigorescu, of Bucharest, glycerin is a perfect and lasting analgesic in the case of burns. Applied at once to the burned surface, it occasions at the instant of application a slight feeling of burning, followed by complete relief from pain. Where the wound is large, it should be kept constantly moist with glycerin. By means of this application inflammation is almost entirely avoided, and sloughing takes place gradually, leaving a much less marked scar than is the case with ordinary dressings."—*Druggists' Circular and Chemical Gazette.*

Miscellaneous.

THE NEW REGIUS PROFESSOR OF PHYSIC IN THE UNIVERSITY OF CAMBRIDGE.—The appointment of Dr. Clifford Allbutt as Regius Professor in the University of Cambridge (in succession to the late Sir George Paget) will certainly come as a surprise to many. Dr. Albutt is a distinguished physician and a clinical teacher of no small repute. He is a graduate—in both Arts and Medicine—of the university in which he now becomes professor, and has also been an examiner in Medicine. A few years ago, however, Dr. Albutt relinquished all his appointments and gave up an extensive consulting practice at Leeds in order to accept a Commissionership in Lunacy. This office precluded him from private practice, and he fixed his abode in the metropolis. Dr. Allbutt now engages for a second time in a career in which he has already attained eminence. He is an original and outspoken thinker, and gave offence to many by his vigorous onslaught on some forms of specialism in the Goulstonian Lectures delivered before the College of Physicians in 1884. A man of very wide views himself, Dr. Allbutt may be trusted to worthily fill the post Sir George Paget adorned for so many years, though he is in many respects a marked contrast to his distinguished predecessor.—*N. Y. Medical Record.*

DR. JAMES STARTIN writes (*Brit. Med. Jour.*): "My attention has lately been drawn to some obstinate cases of local eczema occurring on the foreheads of men, especially young men; and, on looking for a probable cause, I found that the ordinary leather lining of hats—that is, the part that comes next to the skin on foreheads more particularly in the high hat—is whitened and glazed with arsenic and other irritating substances. Many times I have been puzzled to know why the ordinary remedies prescribed for this peculiar cutaneous eruption, simulating eczema in every respect, would not benefit the disease."—*Maryland Medical Journal.*

MEDICAL COUNCIL OF BRITISH COLUMBIA.—At the medical examinations held on 3rd, 4th, and 5th ult., there were six successful candidates, namely: Dr. Ferguson, Vancouver; Dr. Sproule, Victoria; Dr. LaBan, Nelson; Dr. Gordon, Vancouver; Dr. Duncan, Victoria; and Dr. Lambert, Yale. One candidate was rejected. The following are the officers elected for the year: President, Dr. W. A. DeWolf Smith, New Westminster; Vice-President, Dr. J. M. Lefevre, Vancouver; Registrar and Secretary, Dr. G. L. Milne, Victoria. The examinations are held three times a year—September, January, and May.

THE number of persons to whom anæsthetics were administered in the metropolitan hospitals of Sydney during the year 1891 was 1986. There were two deaths, one at the Moorcliff Eye Branch under chloroform, and the other at the Prince Albert Hospital under a mixture of chloroform and ether.

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THE

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A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

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Original Communications.

THE MANAGEMENT OF THE THIRD STAGE OF LABOR.*

BY A. H. WRIGHT, B.A., M.D., M.R.C.S. ENG.,

Professor of Obstetrics in the University of Toronto.

A paper on this subject was read before a meeting of this Association in Hamilton eight years ago by the late Dr. George A. Tye, of Chatham. I was very much impressed by the views at that time enunciated, although I differed from the reader in many, if not most, of his conclusions. It was my pleasure to have an intimate acquaintance with Dr. Tye; and I am thoroughly convinced that he was one of the most conscientious workers, one of the most careful observers, and one of the grandest physicians that this country has ever produced. On the occasion referred to, he took a strong stand against Credé's method of expressing the placenta, and warmly advocated the expectant or do-nothing method. He stated that he had practised this plan of forcible expression for ten years, with bad results, inasmuch as he had a large number of hemorrhages. He had observed during a portion of that time that when called to cases which had been attended by midwives, who left the expulsion of the placenta to nature, that flooding seldom occurred, although the placenta was frequently retained a long time. He then abandoned the method, and pursued the expectant plan for seven years with good results. He thought that it not only tended to prevent the occurrence of hemorrhage, but also assisted in the prevention of puerperal fever.

With due respect for one whose opinions were always worthy of careful consideration, I will refer to some of his statements at a later stage.

On consulting Tyler Smith's work on obstetrics, which was the first I read in my student days, I find the following directions with reference to the management of the third stage of labor: "When the pains recur (after the birth of the child) gentle traction should be exerted upon the cord. . . . If there should be no pain, the finger should be introduced into the vagina, and the stringy insertion of the cord will generally be felt. . . . In extracting the placenta slow and gentle traction only should be used, as by this means the whole of the membranes . . . are likely to come away with the placenta." Other British obstetricians, and especially those of the Dublin school, at that time advised pressure on the uterus after the birth of the child as the best method of expelling the placenta, and preventing post-partum hemorrhage. To Credé, however, is due the credit of giving the most complete description of expelling the placenta by force applied externally to the uterus, as opposed to the method of extraction by pulling on the cord.

What, then, is Credé's method? I know of no procedure in midwifery which has given rise to more confusion than this same method. This has arisen from the fact that Credé in later years made an important change in the plan he

*Read before the Ontario Medical Association, June 1, 1892.

first adopted and described. After the expulsion of the child he applied friction to the fundus, and when the first uterine contraction occurred he grasped the fundus in his hand, with the thumb on the anterior wall and the four fingers on the posterior wall, and thus squeezed out the placenta—"as the seed from a ripe cherry compressed between the thumb and fingers." His aim appeared to be to complete the operation as soon as possible, and, according to some of his earlier statistics, the average duration by expression was 4½ minutes. This method was popular for years, although many opposed it. After a time the opposition grew stronger, and a reaction set in. It was then condemned as harsh and unscientific. I think there can be no doubt that the adverse criticisms which became so common at this time were essentially correct. In the hands of many, if not the majority, it was extremely harsh, and caused much unnecessary pain. Too much attention was given to a rapid expulsion of the placenta, and too little to the expulsion or extraction of the membranes. As a consequence, large portions of the latter were frequently left in the uterus. The rapid expression of the placenta partially emptied the uterus before retraction and contraction were properly established. Under such circumstances accoucheurs were likely to meet with two conditions —inertia of the uterus and retention of membranes—which together were always likely to favor post-partum hemorrhage. And yet Credé's chief aim was to prevent such hemorrhage.

It is somewhat remarkable that results so varied should follow any one plan of treatment. I think that in the hands of Credé and his assistants the results were generally satisfactory; but it was soon discovered that the dangers to which I have alluded were very serious in the practice of many who were either unskilled or improperly taught. Without going too minutely into details, I may say that Credé himself, after practising his method some years, recognized these defects, and accepted the rule that no one should endeavor to squeeze out the placenta until at least fiteen minutes had expired after the expulsion of the child. This extremely important modification of Credé's original method is a great improvement, and, while it makes the plan almost perfect in the opinion of the great majority, will account for the many misconceptions which have appeared in the numerous discussions which have taken place on this subject.

I have no doubt that the bad results which Dr. Tye noticed in his practice were entirely due to the faulty features in Credé's earlier efforts; together with the very defective descriptions of his work. When results so disastrous followed the obstetric efforts of so able and careful a practitioner as Dr. Tye, it is difficult to have any idea of the injuries which might follow such defective methods in the hands of the rank and file of the profession in this and other countries. In discussing the subject, I shall consider the modified Credé method and that of the Dublin school as practically the same, and actually the best known; but I think that many of the details are worthy of a critical discussion.

My description of my conception of the method need not be long. While the child is being expelled keep the left hand on the uterus, and endeavor to keep it contracted. In my own practice, my aim is to keep this hand on the uterus for at least half an hour after the expulsion of the child. I use the right hand to place the child in a proper position, or get the assistance of the nurse for the same purpose. I object to the practice of asking the nurse to press on the uterus while the accoucheur ties the cord. In my experience, I have not met one nurse in ten who is able to perform this duty effectually; and I make it a rule, on that account, to ask the nurse to tie the cord. If I am not satisfied with the way the ligature has been applied, I re-tie the cord after I consider it safe to remove my hand from the mother. Harsh friction or rough kneading is quite unnecessary. I would like to emphasize this point, because I have seen methods unnecessarily rough employed by competent practitioners. It frequently happens that a slight friction with one or two finger tips is quite sufficient to keep the uterus well contracted. Wait 15 to 30 minutes before making any active efforts to express the placenta. If possible, choose the acme of a pain, or, more correctly speaking, of a uterine contraction. Endeavor then to squeeze out the placenta either with one hand in the manner before referred to as described by Credé, or grasp the fundus with both hands, taking care to squeeze and press in the direction of the axis of the uterus. When you are confident that the placenta has left the

uterine cavity, I think traction on the cord, as practised by those of the Dublin school, will often afford material assistance.

After the expulsion of the placenta, we have to consider the extraction of the membranes. I say extraction, as distinguished from expulsion, advisedly; and I think the directions usually given in our text-books on this point are exceedingly defective. It is a very common practice to continue squeezing the uterus, and at once commence turning the placenta so as to twist the membranes into a cord. I believe the result of this method is frequently to tear through the membranes, while a considerable portion of the same is retained in the uterus, which is being squeezed so tightly. We are so thoroughly imbued with the *vis a tergo* idea in connection with the delivery of the child and placenta that we are apt to forget that the extraction of the membranes should be effected by an entirely different process. My advice in connection with this procedure is to take plenty of time—not less than 5 to 10 minutes. Don't drag away the membranes rapidly, but support the placenta in such a way that it will not pull forcibly on them; watch for slight relaxations or dilatations of the uterus, and during such coax them away. If you detect a slight tearing on one side, pull gently on the other. A little judicious twisting may assist sometimes, but remember the dangers connected therewith, and beware.

If no abnormal condition be present, it is quite unnecessary to introduce the fingers or hand into the vagina or uterus during the third stage of labor. In speaking to my class of students, or in giving directions for my cases in the lying-in hospital, I insist strongly that the finger shall not be introduced into the vagina after the delivery of the child if it be possible to avoid it; and, in the great majority of cases, such procedure is entirely useless. My objections, however, are not based on mere inutility, but on the fact that this is the period when there is the greatest danger of introducing septic matter into the system. The passage of the child has produced tears of greater or lesser extent in the cervix, vagina, or perineum, or perhaps in all three combined; and the open-mouthed blood vessels and lymphatics are ever ready to absorb and distribute through the body any poison that comes within their reach. If you happen to be in doubt as to whether small portions of membranes are retained, don't investigate too carefully; leave them alone; if no septic matter be introduced, they are not likely to do any harm. If you have reason to believe that large portions of membranes or placenta are retained, it will be necessary to introduce the fingers or hand and remove them; but be careful to use the best methods of cleaning your hand and arm which science and art have placed at your disposal. Wash and disinfect them as carefully as if you were going to perform an abdominal section.

Many discussions have taken place recently with reference to the physiology of placental expulsion. I have not time to discuss this question in detail, but I will give briefly the views which prevail with the majority. Detachment of the placenta is caused by a contraction in the area of its insertion, in which contraction the placenta itself cannot share. Separation occurs in different ways, varying according to the position of the placental insertion. When inserted at the fundus it begins to separate at the centre, forming a cavity in which a certain amount of blood accumulates. When separation is completed the fœtal surface of the placenta falls towards the cervical canal, and the membranes follow, being turned inside out and containing a certain amount of blood. The placenta and membranes emerge in the same order from the vulva. When the placenta is inserted in the anterior or posterior wall the separation begins either at the upper or lower edge, and, as it descends, may appear at the vulva either by its fœtal or maternal surface. The lower the insertion, the more apt is the maternal surface to present at the vulva. The views herein expressed do not coincide with those of Matthews, Duncan, and others, who thought that when there was no interference the common method of separation was such that the edge of the placenta presented at the cervix. The practical point to bear in mind in this connection is that when traction on the cord is employed before the placenta is dislodged from its place of insertion, the initial separation is central; a partial vacuum is thereby produced, which sucks the blood from the large uterine vessels, or tends to invert the weak and flaccid uterine walls. This generally admitted fact

furnishes the strongest and most convincing argument against the pernicious practice of early traction on the cord.

There are three objects gained by the modern Credé method:

(1) By maintaining retraction and contraction of the uterus, it prevents hemorrhage.

(2) By causing rapid expulsion, it tends to prevent the dangers accruing from retention.

(3) By thoroughly emptying the uterus, without introducing the fingers into the genital canal, it tends to prevent septicæmia.

I think it quite unlikely that the puerperal fever observed by Dr. Tye was caused by the faulty Credé method, but rather by the introduction of septic matter from without by unclean fingers. The fact that puerperal septicæmia is nearly always due to such causes is generally admitted; and yet, I am sorry to say, it is not even now properly appreciated. I have seen, during the last few years, some very absurd specimens of so-called antiseptic methods in the hands of men who acknowledged the necessity for antisepticism or asepticism in midwifery, but scarcely had the first idea of the proper methods of carrying out the principles or practice involved. It is not my place here to describe such methods, but I wish to state very emphatically that no system of procedure (whether Credé, expectant, or otherwise) gets anything like fair play in the hands of one who has not correct and positive ideas about asepticism. The statistics or general results of any one who is indifferent about such matters are simply not worth considering.

This brings me to the question, What shall we do after the placenta and membranes are delivered? As I have before indicated, it is frequently necessary to watch the condition of the uterus for some time to prevent, as far as possible, relaxation and dilatation. I wish to refer now, however, more especially to the treatment of the bruised and wounded genital tract. Nature's efforts at repair are magnificent and effective, if we give her anything like a fair chance. The internal wounds of cervix and vagina are, as a rule, healed with wondrous rapidity, notwithstanding the continuous passage of the uterine discharges over them, if you simply refrain from poisoning them. My advice is: Wash thoroughly the vulva and adjacent portions; use what are technically known as antiseptics or not, just as you please. However, as soap and hot water are always indispensable, and as they are at the same time antiseptic, I can scarcely recognize the correctness of the term "aseptic midwifery." As to the tear of the fourchette or perineum, treat it as you would any ordinary wound on approved surgical principles. If it be of considerable extent, introduce sutures as a matter of course, and dress it carefully. On account of the ordinary discharges, you will require to change the dressings frequently. Whether you use antiseptic pads or ordinary diapers, see to it that they are perfectly clean, and changed as often as is necessary. In a general way I may say: Keep the vulvar surface perfectly clean and free from smells; prevent the ingress of germs into the genital canal; leave the internal wounds to the care of themselves; avoid the routine use of vaginal or intra-uterine douches.

I cannot pursue this aspect of the subject any further, but will recapitulate and epitomize with reference to the essential features of Credé's modified method of completing the third stage of labor as follows:

After following down the uterus during the expulsion of the child, keep the hand on the fundus, using gentle friction, if required, to prevent relaxation of uterine walls for a period of 15 to 30 minutes (usually 15 to 20 minutes).

During the acme of the first strong uterine contraction, squeeze the fundus and upper walls with one or both hands, pressing in the direction of the axis of the uterus. Do not use too much force, and repeat, if necessary, during subsequent pains.

When you feel certain that the placenta is forced out of the uterine cavity, slight traction on the cord is allowable, and may assist a delivery.

After the expulsion of the placenta, take plenty of time for the extraction of the membranes; do not pull forcibly on them, but coax carefully during uterine dilatations.

After the extraction of the membranes, wash carefully, dress, and treat according to sound surgical principles.

PROF. HARE said that next to cocaine, the best local anæsthetic that we have is menthol. —*College and Clinical Record.*

THE SURGICAL TREATMENT OF HERNIA.

Remarks made before the Ontario Medical Association
BY DR. H. O. MARCY, OF BOSTON,
President of the American Medical Association.

Dr. Marcy regretted his inability to exhibit to the association a series of screen pictures illustrative of the anatomy and pathology of hernia, and consequently devoted the time at his disposal to the discussion of the methods best adapted to its cure. After referring to the exceptional history of operative measures which in preceding centuries had been advocated, only to fall into disuse and be forgotten, Dr. Marcy briefly sketched his own personal experience. Fortunately his first cases were operations for strangulated inguinal hernia in woman, and he used buried catgut sutures as an expedient for the retention of the abdominal contents and closure of the wound. He did this as an induction, based upon the experimental studies of Professor Lister in the ligation of arteries, from whose clinic he had just returned to America in 1870. He instituted a long series of histological researches upon the changes which supervene when aseptic animal tissues are buried aseptically in healthy animals, and demonstrated that a remarkable series of proliferative cell-changes ensue about the buried foreign material; *pari passu*, as the connective tissue cells of the implanted structures are absorbed, the exudative cells are transformed into newly-developed connective tissue, which replaces the dead material, and thus forms a living band marking the site of the buried suture, enclosing and re-enforcing the parts. Although this proved a discovery of fundamental importance in the coaptation and closure of all aseptic wounds, its value is especially apparent when applied for the re-enforcement of the parts involved in the cure of hernia.

The *bête noir* in the cure of hernia for the centuries has very naturally been the inguinal variety in the male, and too much emphasis cannot be made upon the wise distribution of nature in the arrangement of the structures for the retention of the abdominal contents and the allowing of the escape of the spermatic cord and vessels without pressure or interference of function. This fact has been singularly overlooked by the authorities, and its importance will be readily appreciated in the attempt at restoration of the parts. The obliquity of the canal is very similar to the entrance of the ureter into the urinary bladder, and, in the normal condition, the intra-abdominal pressure is ever maintained at a right angle to the line of the canal.

This is of fundamental importance in the attempt at restoration of the parts in order to effect a permanent cure, a procedure impossible without the use of buried sutures, since in no other way can the internal ring be closed, the cord lifted to a higher point of escape, the obliquity of the canal reformed, and the underlying parts re-enforced.

Although a seeming heroic measure, in the hands of an experienced surgeon the operation is not essentially severe or difficult. The section is freely made until the canal is opened, the cord gently lifted until its exit from the abdominal cavity is plainly apparent. The peritoneal sac is usually resected after having been sutured to its very base, in order that its internal surface may no longer afford lodgment for an abdominal viscus. The posterior structures are carefully approximated with a deep double buried tendon suture, and the internal ring is closed quite upon the cord; thereby, as in no other way, reforming the obliquity of the canal. The cord is replaced, and the external tissues are rejoined by uniting in a similar manner Poupart's ligament to the conjoined tendon, closing the parts evenly in apposition upon the cord. A third and sometimes a fourth layer of buried continuous sutures are applied for the more careful coaptation of the divided structures. The skin itself is coapted by a layer of fine tendon sutures, taken in a blind running stitch through its deeper portion only, without the addition of a single external suture.

The incision through the skin having thus been reduced to the dimensions of only a line is hermetically sealed with iodoform collodion, reinforced by a few fibres of cotton, and this is the only dressing applied. It is needless to remark that Dr. Marcy is one of the most careful of aseptic operators, since upon these conditions alone, most rigidly enforced, is it safe to apply buried sutures. "An *aseptic* suture *aseptically* applied in *aseptic* structures." . . . "Scrotal œdema and tenderness of the wound is almost entirely wanting; the patient is con-

fined to the bed only a few days, and at the end of a month may safely undertake light duties." It is emphasized that a truss should not be applied after recovery.

Dr. Marcy has now operated about two hundred times, and reports that so far as he has been able to follow his cases, which is the greater majority of those operated upon, quite ninety per cent. have remained permanently cured. In no instance has he seen a patient approach what seemed to be the danger line where the intestine itself had not been involved. He has often removed large pieces of deformed omentum with seeming impunity. A modification of the above method is applied to the other varieties of hernia, and in umbilical and ventral hernia for a long period he has put into effect a method which might be denominated a flap-splitting of the abdominal wall for the purpose of inverting and everting of the coapted edges, thereby greatly strengthening and re-enforcing the parts involved.

PRIMARY CARCINOMA OF LIVER, WITH DILATED STOMACH.*

BY J. T. FOTHERINGHAM, B.A., M.B.

Gentlemen: The specimens that I have the pleasure of presenting this evening were obtained at a *post mortem* in which I assisted Dr. W. H. B. Aikins about ten days ago. They have been kept in strong brine until 24 hours ago, when I transferred them to methyl-alcohol. The body from which they were removed was that of a man of 31 years or so, who had been ailing since last December with stomach symptoms, and had placed himself in the care of some Christian Science healers. The death certificate was filled in by one of the oldest practitioners in the west end of the city, and the cause of death assigned was chronic indigestion. A correct history of the case cannot be obtained, as his physicians do not hold a diagnosis to be necessary in order to a cure. The liver was plainly visible through the thin abdominal parietes as an irregular nodular tumor in the epigastric and upper umbilical regions. On opening the abdominal cavity the organ was found quite adherent to the anterior parietes, about the median line of the epigastrium. There were no adhesions to the stomach or any of the underlying organs, and no ascites. Jaundice seemed not to have existed, so far as one could judge from appearance after death; at any rate it was very slight. The distribution of the neoplasm in the specimen will explain the absence of ascites and jaundice. Fagge says that there are two causes, usually, for ascites in cancer of the liver; first, the involvement of the portal veins by extension of the growth along the channels of a large number of its branches; or, secondly, the chronic peritonitis which starts from the serous surface of the organ. Of course a broad distinction must be made between true cancer of the liver and cancer of the structures entering the portal fissure, the latter only acting mechanically, and producing possibly both ascites and jaundice. Fagge says also that, with the exception of cirrhosis, the only disease in which these symptoms are often found together is cancer of the lesser omentum or of the structures entering the portal fissures.

I should submit some reasons for calling this a primary carcinoma. First, perhaps, though it is not according to the precepts of the rhetoricians, I may give my strongest one, that there was no sign of cancer at the pylorus, or in any other organ or part of the body. The rectum was free, as also the gall-bladder, and the whole intestinal tract. Cases are on record in which carcinoma had been called primary when it was in reality secondary to disease of the vertebræ or os innominatum, the lesion in the liver being the only one detected clinically. In this case the examination for metastatic growths was also fruitless.

So far as the history is known it bears out the view that the liver was the first and only seat of the trouble, as the sense of illness had been of only short duration. The weight of the organ was 6 lbs. 10 ozs. The much greater weights on record, 18 lbs., 19½ lbs., and one case of 24 lbs., with a final record of 25 lbs. in another case, are, so far as I am aware, all secondary cancers. I should like to hear the opinion of pathologists of greater experience than myself on the question, whether in a man of ordinary strength of constitution, and with ordinary conservation of failing strength

* Read before the Pathological Society of Toronto, April 30th, 1892, with specimens, gross and microscopical.

by food and treatment, death should have occurred while there was still so large a portion of the liver acting normally and no metastasis? The whole right lobe, or nearly all of it, is apparently uninvaded by the new growth.

The microscopic specimens submitted are not nearly so good as I could wish, but show atrophy and pigmentation of the small amount of liver tissue persisting, with dilatation and thickening of the interlobular vessels (cirrhosis). The new tissue shows the characteristics of great malignity, the fibrous tissue being small in amount, and the invading cells being very large, and round in prevailing shape, while there are no signs of degeneration or change in cancerous cells, which from their position in the centre of a large focus of growth would show such change if they were not still young and growth rapid.

The Stomach: Apart from moderate dilatation and slight catarrh, it was normal. It may be that death was due to simple inanition; this, again, being caused by the weight of the overlying tumor causing obstruction and compelling vomiting. The latter was the symptom on which, mainly, the death certificate was given. There was nothing in the condition of the stomach *per se* to cause vomiting. One can at least advance the theory that whereas in partial obstruction by cancer of the pylorus vomiting occurs regularly after a varying length of time, during which food enough could pass on into the intestine to make death by starvation a very slow process, there might still be in this case sufficient mechanical obstruction to prevent the passage of almost any food through an otherwise normal pylorus, and so cause vomiting at so early a stage of digestion as to prevent nutrition almost altogether.

Selections.

ALARMING ATTACKS OF DYSPNŒA POSSIBLY DUE TO TEA—DIAPHRAGMATIC ANGINA? — I saw with Mr. Hewer, of Highgate, and in consultation with Dr. Gowers, a gentleman who had suffered from some peculiar and very alarming attacks allied to angina. He was a rather delicate man of nervous organization, and with a history of gout in his family. He had recently suffered from rheumatic stiffening of his right shoulder-joint with secondary atrophy of the deltoid, and for this he had been under treatment by massage just before the attacks which I have to record occurred. Both of the attacks referred to had happened after breakfast. He had taken for breakfast eggs and bacon and tea. Mr. Hewer, who lived near to him, had seen him in both attacks, and had relieved him very speedily by the injection of morphia, and after the attack had passed off Mr. M—— had appeared tolerably well again, though weak. The attacks had occurred on each occasion whilst in bed. Mr. Hewer described the attacks as very alarming, and said that the patient had a corpse-like pallor, and was apparently quite unable to make an inspiration on account of the severe pain caused by it. He said that it appeared to him that the diaphragm and chest muscles were fixed. He did not consider that the attacks were ordinary angina, since the pain was referred more to the epigastrium and lower part of chest than to the shoulder, and inability to inspire seemed to be the prominent condition. The pulse during the attacks was very feeble, and the patient was only able to speak in a whisper. On the first occasion he expressed his belief that he was dying. On each occasion the attack had lasted, as I understood, about an hour, and was terminated by the use of morphia. On asking the patient himself how the attacks came on, he said that on each occasion he had thought that his breakfast had disagreed and given him flatulence, his first feeling being a sensation of distension of the stomach, which soon increased to great discomfort and then to great pain. With the latter came a sense of inability to draw breath, and of impending death.

Dr. Gowers made a careful examination of the chest and heart, with, for the most part, a negative result; at any rate, it did not reveal any organic disease of a nature to explain the attacks. The heart's action was feeble. The patient was admittedly a very nervous man, and one in whom all sorts of pain produced exaggerated results. Making, however, all allowance for this, there was no doubt that his attacks had been very alarming; for his wife and all who saw him, Mr. Hewer included, thought that he was dying. I was interested in noting that both the attacks had occurred just after eat-

ing a good breakfast in bed, and just after having partaken freely of tea, and, amongst other suggestions as to treatment, I advised strongly that he should not take any more tea at present. He was not a smoker, and was accustomed to take tea freely. I have known a cup of strong tea taken inadvertently in the afternoon produce attacks of breathlessness very similar, though not nearly so severe as those that he had experienced, and one of the ordinary symptoms produced by the disagreement of strong tea is, I believe, a sense of tightness behind the sternum, with some feeling of difficulty of breathing.

The above notes were taken in 1888. In April of the present year (1891) I wrote to Mr. Hewer to ask if he could tell me anything as to the sequel of the case. In his reply he has informed me that the patient now enjoys good health, and has never had any return of the angina symptoms. He expresses his belief that in attributing them to tea we were probably right. It is, of course, easy to suggest several fallacies. The attacks may have been due simply to flatulence, and not directly to the influence of tea. They may possibly have had some connection with the fact that the patient kept in the recumbent posture after a rather liberal meal. Neither of these suggestions is, however, very probable. I am rather inclined to suspect the tea itself, because, as already said, I have known other instances of somewhat similar effects, in which the sources of fallacy were fewer. A medical man described to me attacks which he felt tolerably certain had been caused by the incautious use of strong tea. On one occasion when going a railway journey he visited a patient very near to the station and gladly accepted the offered cup of afternoon tea. The tea was very much stronger than he was accustomed to, and he took it without eating. Having driven straight to the railway station he got into his carriage without any hurry, but just as the train was starting he was seized with a most distressing sensation at the region of the heart, and felt as if he would be unable to breathe. He was obliged to open the window and lean forward with his head half out and his arms uplifted, and holding to the sides of the door. After half an hour in this position, with most distressing dyspnœa, the attack passed off. Its recurrence, though not with such great severity, but under very similar circumstances, made so strong an impression on his mind as to the cause of the attacks that for a long time he never ventured to drink tea except in his own house, where he knew its quality and strength.

The attacks described in Mr. Hewer's patient were not very dissimilar from those from which John Hunter suffered, and which he has himself so graphically described. To whatever cause we may incline to attribute them, they certainly afford examples of very alarming attacks for which no adequate organic explanation can be given.—*Jonathan Hutchinson in Archives of Surgery.*

A PLEA FOR THE TOOTH-BRUSH AND DISINFECTION OF THE MOUTH IN CHILDREN, ETC.—It is only recently that the study of bacteria of the human mouth has been zealously pursued by various investigators, and much has been accomplished toward bringing to light the causes of the various affections of the mouth and its associate parts. Prof. Muller, of Berlin, has repeatedly said that the human mouth was the abode of numerous microscopic organisms. But it is only within the last five years, really, that the more exact methods of bacteriological investigation have come into use, and thus a more definite knowledge acquired as to their form and life. There is no part of the human body which furnishes better spots for their cultivation than that of the mouth and teeth. There are now known nineteen different pathogenic micro-organisms, which have been experimented with, and there are found many of those organisms of the character called non-pathogenic, which means that they do not produce a certain specified disease, but may become, under favorable conditions, pathogenic in the development of certain diseases which, up to the present time, we know nothing of. These organisms of the non-disease-producing kind—or non-pathogenic—live and propagate upon the various organic substances in the secretions of the mouth—particles of food which have been allowed to remain after meals between and in cavities of carious teeth and neighboring parts. So far these last-named organisms act deleterious on the teeth only. These organisms have a chemical power of

changing the secretions left in the mouth into certain acids and ferments. It is within a short time only that the decay has been shown to be caused by the decalcification of the tooth substance, followed by a solution of the decalcified base substance. This is brought about by these acids, among them chiefly lactic acid. These acids are principally formed by these organisms. Leyden and Jaffe found that the leptothrix buccalis bacteria, which also inhabits the mouth under certain causes, has given rise to severe lung troubles. Also, that from a class of bacteria found in bad teeth, abscess of the neck, abscesses at the root of teeth, chronic disturbance of digestion, both of stomach and intestinal, abscess of the tonsils, diphtheria, all kinds of pharyngeal inflammation, and other parts closely associated.

That there exists in the human mouth such bacteria that produce malignant forms of disease is now proved beyond a doubt.

These bacteria may remain there latent until such a cause presents itself for cultivating in a medium suitable for their existence, as, for instance, in the drawing a tooth, where a fresh wound is left, and also the fact that it has proved dangerous to scratch one's finger on a sharp tooth in an unclean mouth, etc.

Now, how should we prevent these bacteria and micro-organisms from developing? What is the course to be pursued?

Above all, every carious tooth must either be sealed by a filling or extracted. Diseased tissues, such as enlarged tonsils, catarrhal affections, post-nasal vegetations, etc., should be attended to. The tooth-brush, above everything, must be used vigorously by all children and adults after each meal. These are the first rules to be observed.

In order to destroy these organisms, a powerful antiseptic must be used, and such a one must be strong enough and possess a non-poisonous quality; also by its use be able to destroy these organisms which breed in the mouth. We know that children always swallow some of the liquids used during the act of either gargling, rinsing, or douching of the mouth.

The zymocide is the newest of the non-poisonous antiseptics. It is entirely free from poisonous vegetable or mineral chemicals, and therefore no danger can arise from absorption through the mouth, wounds, or stomach, etc. Ready for use as a mouth-wash, dilute from ten to twenty parts to that of water. This new antiseptic and detergent preparation represents the latest advancement in chemical sciences and pharmaceutical skill. It is composed of extract golden seal, extract calendula, stone root, sulphocarbolate of zinc, extract witch-hazel, boracic acid, thymolate of soda, and menthol. It is manufactured by Reed & Carnick, whose preparations are already known to the profession as reliable.

Another very important antiseptic is the peroxide of hydrogen (medicinal—Marchand's), which is already known to us. This is to be used in the mouth, diluted one to three of water. Such substances as carbolic acid, chlorate of potash, salicylic acid, corrosive sublimate, creolin, etc.—these are all poisonous substances and deleterious to the teeth; besides taking into consideration the great possibility of poisoning by long-continued use of these chemicals.—*J. Mount Bleyer, M.D., in the Archives of Pediatrics.*

THE VITALINE CRAZE.—To call it consternation is not too strong to a term; for although we do not accredit the statement that ten thousand people in Russia have received injections of the stuff "vitaline," there is without a doubt a panic on the subject of this injection—this most absurd so-styled "rejuvenator" of old idiots and antidotal preserver of young ones. The story of the "discovery" of this "new remedy" is an old story revived. A wanderer from his native land, this time one Gatchkowsky, an engineer, was sent on his own business into the Trans-Caspian territory, and there, amongst a primitive people, he heard of a new specific. "A Chinese *savant*" revealed to him the particulars of a miraculous compound medicine which, being instilled into the blood of a man, would cure everything: it was more than a mere panacea; it was a "rejuvenator," a curer of such fatal diseases as consumption of the lungs without fail. All previous wonders were to be surpassed by it, and the scientific world was once more to be set in commotion by a discovery that should show how natural law in disease could be overthrown in wholesale fashion. For a time—happily short, yet long enough—the new

practice made its way, and we are told the regular practitioners of medicine in St. Petersburg were dumbfoundered by the presence of the "tide of fashion and favor" that set in. To some invalids, real or supposed, the "vitaline" was administered by injection subcutaneously; to others it was administered externally. Prices for the medicine and its application varied; the rich paid the largest fees, but the poor also paid, and some of them also largely. The Czar himself was counselled—by whom is not known, but we should suppose not by any authorized medical adviser—to let his son, the Grand Duke George, undergo the treatment. At last a somewhat less important man, but still one of great importance, was subjected to the remedy, and he, General Gresser, the Prefect of St. Petersburg, and one of the firmest and shrewdest of the guardians of the imperial power, was led to submit himself to the operation, and by the submission sacrificed his life. How, precisely, the sacrifice was brought about, we have as yet no satisfactory details. The discoverer of "vitaline" turned round in his defence from the sublime to the ridiculous. The omnipotent remedy at once diminished from its potency into a mere mixture of borax and glycerine—a harmless mixture for good or for evil. If death resulted from the use of it, a dirty syringe used for the injection must have been the true cause; but M. Gatchkowsky, having made a clean breast of his discovery, will practise the art of cure no more; and if he be not, in the panic, charged with political offence and of systematically poisoning the Prefect, he is fortunate. The history of this latest blast of quackery recalls some of olden times which it has been the duty of *The Lancet* to expose and trample out. The case of the notorious St. John Long comes at once to mind. In this case the results which followed the practice of the astute quack were practically the same as those we have just witnessed. What is more, the secret, which Long sold, as was reported, for £3000 to a lady of fashion, turned out, in the end, to be no secret at all. The element of the treatment was counter-irritation, and the vaunted composition employed as a liniment was nothing more and nothing less than spirit of turpentine and strong acetic acid. One day the famous nostrum went wrong in its action; it caused, or was accused of causing, a diffuse cellulitis in an unfortunate victim, and then not only was its fate sealed, but in defence the secret was exploded in the proof of its harmlessness and its perfect simplicity. Against this specimen of quackery the founder of *The Lancet* fought tooth and nail. He neither hesitated nor paused until the mischievous practice was expelled for good. In this fight, moreover, he had not the whole voice of the profession with him. On the contrary, one man in the profession stood by the delusion to the last, and vainly maintained his advocacy of it after the bubble had burst and its inventor with it. It is our business still to expose and protest against these frauds on humanity, exploited, as they are, at the risk of human suffering and death.—*Lancet.*

OBSTETRICS AND GYNECOLOGY IN MOSCOW.—The report of the lying-in department of the Golitsinski Hospital in Moscow for 1891, by Dr. Inoieffs, has just been published, and in addition to its statistics contains several interesting papers. The total number of labors conducted in the department during the year was 713. Very nearly equal numbers of these were concluded during each of the four quarters of the day, the slight difference existing being in favor of the evening quarter—namely, from 6 p.m. to midnight. Detailed tabular observations are given of the 17 cases of twins and of the 24 cases of contracted pelvis, that is to say, where the external conjugate diameter was below 18 centimetres. There were 4 fatal cases—1 from croupous pneumonia, 2 from anæmia, and 1 from septic endometritis and parametritis. The antiseptic employed was corrosive sublimate. The use of the forceps was required in 15 cases, laceration of the peritoneum occurred in 14 cases, and rupture in 17. There were 7 cases of craniotomy, and one of evisceration. With regard to the puerperal period, there was no fever—*i.e.*, temperature above 38° C.—or other complication in 599, or 84.1 per cent., of the cases. There were only 8 cases of true puerperal diseases—*i.e.*, 2 of colpitis with endometritis, 4 of endometritis, one (fatal) of septic parametritis with endometritis, and one of mania. In the 8285 cases attended in the department since 1868, there have been 309 cases of true puerperal diseases and 64 deaths, 20 of which are

attributed to non-puerperal affections. In all this number the employment of the forceps was required only in 189 cases, craniotomy was performed 33 times, and evisceration once only. There is no mention of the Cæsarean operation. Amongst the reports of the gynecological sections there is one dealing with electrical treatment by Dr. Dyski, a tabular view of twenty-eight cases being given. The best result was obtained in parametritis, a lesser degree of success being secured in oophoritis, and still less in salpingitis. With regard to fibromata, some degree of subjective improvement was always obtained, but the tumor did not in any case appear to become reduced in size. This agrees with the experience of most other Russian writers on the subject—Massen, Himmelfarb, and Kholmogoroff—though Neêloff, who reported twenty cases to the Kieff Obstetrical Society in 1890, had succeeded in reducing the tumor in seven instances to some small extent. Dr. Dyski calls attention to two cases of gonorrhœal endometritis which had been treated unsuccessfully by various ordinary methods, and which only yielded to repeated electrical applications, the anode being introduced into the cavity of the uterus. In one case the discharge so nearly ceased that the patient considered herself cured, and did not return after eighteen sittings; the other, which was complicated with salpingitis and perisalpingitis, was quite cured after twelve applications of the induced and six of the constant current. Dr. Dyski remarks that the antiseptic properties of the anode of a galvanic current render it a peculiarly suitable agent in obstinate gonorrhœa of the internal genital organs in the female. It is of course advisable in all gynecological cases where electricity is em ployed not to depend upon it entirely, but to make use of other local and general treatment simultaneously with it. In several of the cases described in the table, the induced current was used for the earlier sittings and the constant current in the later ones.—*Lancet.*

FIFTEEN YEARS OF IMMUNITY AFTER REMOVAL OF CANCER OF THE LIP FOR A THIRD RECURRENCE.—In reference to the non-recurrence of cancer of the lip after removal, the case of a Mr. R——, who is now aged 73, is of some interest and value. This gentleman had had a sore twice cut from the left part of his lower prolabium. He came to me with a third recurrence. The sore had extended rather widely, but not deeply. For this reason I did not employ the usual V-shaped incision, but destroyed it very liberally indeed by means of the actual cautery. I find it described in my notes of March 12, 1874, as "an ulcer with hard edges, but without papillary growth." In August, 1889, that is, fifteen years later, Mr. R——came to me again for another disease, and I had the satisfaction of finding that his lip had remained quite sound, and that no gland disease had developed. There are doubtless many cases in which after excision of epithelial cancer of the lower lip no local return is ever witnessed. I fear, however, that it is exceptional to escape subsequent implication of the lymphatic glands. On the rarity of permanent immunity, Sir James Paget has expressed a strong opinion. In the present instance a third recurrence after excision well proved the local tendency. As regards the mode of operating, I believe that in certain forms of cancer of the lip which extend widely, but not deeply, and in which sometimes it is not easy to assign the limits of the disease, that the actual cautery, if very freely used, is more efficient than the knife.—*Jonathan Hutchinson in Archives of Surgery.*

BARBIER: CONCERNING CERTAIN MICROBIC ASSOCIATIONS IN DIPHTHERIA (*Rev. Mens. des Mal. de l'Enf.*, September, 1891).—In diphtheritic membrane one finds, in addition to the Klebs-Loffler bacillus, certain organisms, of which some are constant, but without influence upon the form of the disease, while others are inconstant, but pathogenic, and give a particular physiognomy to the disease. Three of these are described as follows: (1) *Streptococcus* (*a*), which is found at certain periods of the year. (2) *Streptococcus* (*b*), which resembles the *streptococcus pyogenes*, and is found in the pharnyx when the mucous membrane is red and swollen, covered with thick and diffluent membrane, associated with adenopathy; it is also found in the blood of the heart. This form is very virulent for guinea pigs, whether injected alone or with the bacillus of diphtheria. This association may occur clinically as follows: The bacillus is installed after

the streptococcus, this being a primary infectious form, or the two infections may be simultaneous, the form which is infectious from the beginning. The streptococcus may be engrafted upon the diphtheria, this being the secondary infectious form. (3) The *coccus y*, which is found in cases of modern intensity, in which there is an abundant muco-purulent excretion, or glandular engorgement. With these facts in view, one may distinguish two principal forms of diphtheritic angina. One pure or toxic diphtheritic angina, which is without general microbic infection, and has the following characteristics, there may be no pharyngeal disease nor general disturbance at first, typical membranes appearing in layers, the mucous membrane is almost normal, and there is no adenopathy, croup is frequently present, with tubular bronchial membranes, and no muco-purulent secretion. When death occurs, it results from nasal and bronchial asphyxia, or from syncope and paralysis.

Streptococcal diphtheritic angina, which is infectious, and corresponds to the hypertoxic or classical forms, and may be due to the streptococcus rather than to the bacillus. It is present in the membranes, the glands, the pus of the canula, the lungs, and the blood. In this variety the head is swollen, and has a leaden hue, a discharge from the nose excoriates the lip, the breath is fetid, pain is severe, there is swelling, redness, and hemorrhage of the mucous membrane. The membranes are thin or putriloginous, there is intense adenopathy, and death occurs in from one to three days. There is purulent bronchitis, without false membrane, and albuminuria. Should the patient recover, ulceration of the pharynx and nose persist for a long time.—*Archives of Pediatrics.*

PRIMARY NASAL SYPHILIS.—At the British Laryngological and Rhinological Association meeting, held Friday, March 25th, Dr. W. Milligan read the following case:—Patient, a married man, æt. 32, experienced pain and discomfort in the right nostril four weeks after exposure to possible syphilitic infection. Towards the latter part of 1884, he had what was diagnosed to be a poisoned wound at the root of the nail of the right index finger. This subsequently proved to be a syphilitic chancre, and was followed by the usual glandular enlargement and cutaneous manifestations, for which he underwent treatment. His wife became syphilized and consulted the same surgeon, being treated by him during the greater part of 1885. The first child was born in July, 1886, the second in January, 1888, and the third in February, 1890. These children appeared to enjoy good health. In consequence of subsequent "reminders," he underwent another course of treatment in 1889, since which time he had remained in fairly good health till the present affection. On examination an oval indurated sore was seen just within the margin of the right ala on its septal aspect which had all the appearances of true Hunterian chancre. No enlarged glands, however, were detected. In spite of local and general treatment, a characteristic roseolar eruption made its appearance at the seventh week. The chancre healed under treatment in about three weeks, and at the present time the condition of the patient was fairly satisfactory. He brought this case forward as a well-marked instance of reinfection after seven years.—*Medical Press and Circular.*

CONGENITAL ABSENCE OF RADIUS.—I wish (Warfield in Johns Hopkins Hospital Bulletin) to report a case of congenital absence of radius in a boy, aged fourteen. He is a well-grown boy, five feet two inches in height, and otherwise well formed. Both radii and both thumbs are wanting. The ulnæ are curved inward and are quite short, the right one being six inches long, and the left one five and three-quarter inches. The humeri are twelve inches long. The hands are bent inwards, making almost a right angle with the ulnæ. The pisiform bones are present, but most of the other bones of the wrist appear to be wanting. The biceps muscle seems to be absent. No pulse can be made out at the wrist. Motion at the elbow is good, but at the wrist pronation and supination are wanting. In spite of his deformity, the boy can write, play ball, fight with other boys, and amuse himself as other boys of his age do.—*Nashville Journ. of Med. and Surg.*

PROF. HARE said that in the treatment of gout and rheumatism the combination of the iodides with colchicum increases the activity and efficiency of both drugs.—*College and Clinical Rec.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, JUNE 16, 1892.

MEDICAL FACULTY OF THE UNIVERSITY OF TORONTO.

The Faculty of Medicine in our Provincial University has been in existence only a few years, and its recent reorganization (as it has been termed) has created considerable interest. The report of the committee of the Senate on the Medical Faculty, which was prepared after the expenditure of a great deal of time and labor, has been approved and adopted by the Senate. The contents of that report have been made public, and have caused considerable comment, favorable and otherwise, a good deal of surprise, and a certain amount of consternation. The editor of THE PRACTITIONER wishes to place on record the fact that he does not approve of the action of the committee in ignoring to such a large extent the vested rights of the members of the corporation of the Toronto School of Medicine. Beyond this simple statement, it is unlikely that this journal will make any further reference to such features of the report which are largely personal in character.

The questions which will interest the professional, as well as the general public, are these: Will the reorganized faculty command the confidence of the friends of higher medical education? Will it prove a source of strength to the University? Will it work zealously and honestly by methods that will strengthen the hands of those who are endeavoring to raise the standard of medical education in Ontario? Without any hesitation or mental reservation, we answer—yes. It is strong, well balanced, and possesses a great teaching capacity; its members are fully impressed with the responsibility which they are called upon to assume; its teachers in all departments will endeavor to work faithfully and well; its efforts in all directions are likely to be crowned with success.

Many vague and dark rumors have been in the air during the last few weeks. We have been told that the other faculties, especially the Arts, were opposed to the existence of the Medical Faculty, and would use their influence to have it destroyed. Perhaps the learned Chancellor had such rumors in view when he used the following words in his powerful address delivered on Commencement Day:

"I plead for harmony and good will, for cordial concert and co-operation, between our several related faculties and institutions, and our various bodies of graduates and undergraduates. Each duly maintaining the special interests of which it feels itself the guardian, let each give generous consideration to the claims of others; above all, let each remember that it is a part of a whole, that the whole is greater than the part, and that the general interests should in all things prevail. Animated by this spirit, we may, aye, and we shall, overcome all difficulties, remove all defects, dissipate all doubts, and cause an honorable and worthy past to culminate in a yet more glorious and transcendent future. May these things be."

As a happy sequel to the deliverance of such golden words, we have much pleasure in referring to the fact that, at the meeting of the Alumni Association of University College, Mr. Dale moved and Mr. Squair seconded a resolution, which was carried unanimously, expressing "the hope that the greatest harmony would continue to subsist between the Arts and the Medical Faculties." Under the circumstances nothing could be more satisfactory to the Medical Faculty, and further comment in this connection is needless.

ONTARIO MEDICAL ASSOCIATION.

The twelfth annual meeting of the Ontario Medical Association, which was held June 1st and 2nd, was quite as successful as any that preceded it. This society has been so uniformly prosperous, its meetings have always been so largely attended, its proceedings have been so well conducted, its officers have ever been so indefatigable in the performance of their duties, that nothing like a reverse has

been encountered since its organization. In a general way a description of one meeting will apply to all.

The president, Dr. Reeve, of Toronto, is one whom all classes of physicians in this province ever delight to honor, and was found on this occasion to be eminently the right man in the right place. It frequently happens that a president simply presides, and lets his secretary and other officers and members of committees do all the work, while he reaps the major portion of the glory. Dr. Reeve, however, had no ambition to be merely an ornamental wielder of the gavel, and showed himself to be something far more substantial than a figurehead. It is well known that he worked continuously and faithfully for a whole year to make the meeting a success; and the cordial and hearty vote of thanks tendered at the last session came from the deepest regions of the hearts of the members present.

It has been our pleasant duty on three former occasions to speak in the highest terms respecting the work of our secretary, Dr. Wishart. This year he appeared to excel himself, if such a thing be possible. In saying that, we can give him no higher praise. The quiet work done by committees may not generally be fully appreciated, but it is frequently all-important; and, during the last year, was certainly very creditable to all concerned, and contributed materially to the success of the meeting.

Our visitors were few, consisting only of H. O. Marcy, of Boston, the president of the American Medical Association; and Dr. Lapthorn Smith, of Montreal. Dr. Vander Veer, of Albany; Dr. W. W. Potter, of Buffalo, and others, were expected, but were prevented from coming—much to the disappointment of their friends.

Upon the whole the papers were good, and the discussions interesting. The committee on "Papers and Business," following a custom which has recently been introduced into many societies, arranged for a symposium on the "Pneumonias of Children," and another on "Hip-joint Disease." The papers and discussions connected therewith were highly appreciated.

The next meeting will be held in Toronto, under the presidency of Dr. Hillary, of Aurora, whose election was evidently popular with all parties.

AMERICAN MEDICAL ASSOCIATION.

The annual meeting of this Association was held in Detroit, June 7 to 10, and is said to have been a successful one. It is well known that the society has been subjected to a number of reverses in the past, but it is hoped by its friends that it is now on the high road to that proud position which it ought to occupy as the best medical association of the continent. Among the Canadians in attendance were Dr. Bray, of Chatham; Drs. Moorehouse and Meek, of London; Drs. Howitt, Cormack, and Lett, of Guelph; Drs. Reeve, Ross, Price Brown, and O'Reilly, of Toronto; Dr. Cotton, of Lambton Mills; Dr. Bruce Smith, of Seaforth; Dr. Gunn, of Clinton; and Dr. Lapthorn Smith, of Montreal. An important feature of the meeting, as far as Canada is concerned, was the introduction of a resolution to so amend the constitution as to allow the admission to membership of all Canadian physicians in good standing. The next meeting of the Association will be held in Milwaukee, under the presidency of Dr. Hunter McGuire, of Richmond, Va.

Meeting of Medical Societies.

ONTARIO MEDICAL ASSOCIATION.

The twelfth annual meeting of the Ontario Medical Association was called to order at 10 o'clock a.m. on Wednesday, June 1st, 1892, the president, Dr. R. A. Reeve, Toronto, in the chair. The secretary read the minutes of the last meeting.

Dr. A. H. Wright, Toronto, opened the discussion in Obstetrics by a paper entitled

THE THIRD STAGE OF LABOR,

which appears on page 269 of this issue of THE CANADIAN PRACTITIONER.

Dr. H. S. Griffin said he felt a certain regret that he was unable to oppose, for purposes of discussion, those points which had been put forward. Haste in removing the placenta was usually disastrous if practised in any other manner than the method proposed by Credé. The expectant plan should be, to a certain extent, always associated with Credé's method. Expulsion of the placenta from the uterus was a definite

procedure, and, as a rule, should not be hastened; while the expulsion from the vagina was indefinite and should generally be assisted. The best means, he said, was by firm pressure with the hand upon the fundus, directed almost directly backwards. The placenta should then be rolled several times, the membranes twisted into a rope and gently coaxed out. The parturient canal was practically aseptic, unless sepsis were introduced from without. Intra-uterine douches were to be deprecated unless the time should come that symptoms of sepsis presented themselves, when they should immediately and thoroughly be made use of. In conclusion, Dr. Griffin stated that perfect cleanliness and coaptation of the external parts formed the total local treatment called for after the delivery of the placenta.

Dr. Preston, of Newboro, remarked that he differed from Dr. Griffin with regard to the time allowed to elapse before the removal of the placenta from the vagina after its expulsion from the uterus. He (Dr. Preston) thought it should be removed at once, and not be allowed to remain plugging up the vagina.

Dr. Geikie, of Toronto, emphasized the desirability of neither being in too great a hurry to remove the placenta after delivery, on the one hand, nor allowing it to remain too long in the vagina, on the other. Allowing it to remain too long, as well as removing it too speedily, tend to post-partum hemorrhage. The application of the broad bandage around the abdomen, with compresses over the contracted womb, Dr. Geikie held to be of great value; and as soon as this has been done, Dr. Geikie held it to be of great value in preventing post-partum hemorrhage to remove all clots from the vagina and os uteri.

Dr. Moore, of Brockville, said: "I am in favor of antiseptic douches, no matter whether we have a rise in temperature or not, always beginning on the second day; not later than the third. I do not remove the placenta immediately, but rather wait, carefully keeping fairly firm pressure over the uterus until I find the placenta coming away. If I find an adherent placenta I remove it, using all the antiseptic precautions possible. I think that douches should be used both before and after the labor. The parturial canal should be rendered aseptic, and kept so. All clots should be removed from the vagina and a firm bandage applied. No traction should be made on the cord. The douche should be given gently, not forcibly. I use bichloride of mercury, one to four thousand, and never had any rise of temperature amounting to anything, and no blood poisoning. I never use carbolic acid."

Dr. Lapthorn Smith, of Montreal, said that he was in favor of allowing nature a little time to enable the uterus to expel the placenta. He used Credé's method, but did not approve of pulling hard upon the cord; but he always gave a dram of the best fluid extract of ergot. He used douches of hot water in every case because it made the woman comfortable. He never used bichloride of mercury because he had seen cases of poisoning from it.

Dr. J. D. Macdonald, of Hamilton, said: "I do not venture to instruct where so many experts have spoken, but I wish to say that the old methods of managing this stage were not so different from those at present recommended. We did not know the value of antiseptics until lately, but we always knew the virtue of soap and water, and I believe that if we do not ourselves introduce impurities on our fingers or on our instruments there is little fear of the passages becoming septic. The placenta may be gently drawn upon as soon as the child is separated and handed to the nurse, but a touch will be sufficient to let the physician know whether it is separated or not. If it is not, let it alone for half an hour; generally by that time it is in the vagina. Avoid force, and do not introduce the hand unless there is urgent need. The poor woman has had enough without that experience. I never had the experience of Dr. Smith, of leaving the placenta for hours. I do not think I have had more fatality than other men."

Dr. A. H. Wright, in closing the discussion, said: "I am quite in accord with Dr. Geikie in urging the necessity for the avoidance of undue haste, and also agree with him in thinking that the ordinary obstetric binder adds to the comfort and safety of the patient, but I believe that a pad in the majority of cases is worse than useless, because as ordinarily used it generally becomes dislodged, and that simply displaces the uterus. While I agree with much that Dr. Lapthorn Smith has told us, I desire to ex-

press a very positive opinion that it is never safe to leave a patient before the expulsion of the placenta We know from the observations of Schroeder and others that the placenta, in the great majority of cases, is expelled from the cavity of the uterus within 15 to 20 minutes. It may lie in the vagina for a long time if we do not assist expulsion, but I consider it absolutely necessary under such circumstances to watch the patient carefully whether we adopt the Credé or the expectant plan of treatment. I object to the use of ergot before the termination of the third stage, or at least before the placenta has left the cavity of the uterus; I have seen it produce tetanic spasm of the uterus, which causes severe pain to the patient, but no expulsive efforts. I was much interested in the remarks of Drs. Griffin and Moore with reference to asepsis, antiseptics, and douches. Our ideal method would probably be as nearly aseptic as possible, but in actual practice I think it well to have antiseptics for external use, especially for the hands and instruments. The use of such antiseptic agents as bichloride of mercury for douches is attended by grave dangers. I have very strong objections to what may be called fussy antiseptic methods, such as those advocated by Thomas and others some years ago. I object also to the routine use of douches after labor. They disturb that physiological rest which is so necessary for the repair of such wounds as those of the cervix. They frequently cause much pain; and they become possible vehicles for the introduction of septic matters."

It being 12 o'clock, the Association adjourned.

At 1 o'clock many of the members availed themselves of the invitation by the Hospital Trust to inspect the Victoria Hospital for Sick Children. The Association reassembled in general session at 2 o'clock, the president in the chair. The minutes of the morning session were read and approved. Dr. R. A. Reeve, president, read his address, at the conclusion of which the discussion in medicine was opened by Dr. A. S. Fraser, of Sarnia, with a paper on "The Diagnosis of Diphtheria." He was followed by Dr. W. Britton, of Toronto, on the treatment, and Dr. Harrison, of Selkirk, on the etiology. As Dr. Wright, of Ottawa, was absent, the discussion here closed.

Dr. J. A. Williams, of Ingersoll, president of the Ontario Medical Council, addressed the Association in an able manner upon recent medical legislation and its effects. At the conclusion, Dr. A. A. MacDonald, Toronto, seconded by Dr. A. B. Welford, Woodstock, moved that a cordial vote of thanks be accorded Dr. J. A. Williams for his clear, able, and eloquent address, and that we, the members of the Ontario Medical Association, cordially endorse the sentiments he expressed, and heartily support the action of the Ontario Medical Council. This was carried unanimously. The Association then divided into sections.

MEDICAL SECTION.

Dr. Arnott, of London, was elected president, and Dr. Clouse, of Toronto, secretary. A paper on

PUERPERAL ECLAMPSIA

was read by Dr. Raikes, of Midland. In the discussion which followed, Dr. Rice, of Woodstock, said: "I have had two cases in eight years. The first case occurred at five months. She had two convulsions before I saw her. I at once gave chloroform and bled, taking away twelve ounces of blood. No convulsions occurred after that. I produced an abortion. The woman recovered completely. The second case was that of a woman æt. 40. First child. I was called at the ninth month. Convulsions ensued. I gave morphia, chloroform, castor oil, and pilocarpine. The patient never regained consciousness. If the patient be full-blooded, I would bleed and give morphia sufficient to keep patient quiet."

Dr. Arnott, of London, said: There are two principal causes for puerperal eclampsia—albuminuria and nervous irritation. This sufficiently indicates the treatment. As soon as albumen is discovered in the urine of a pregnant woman, diaphoresis should be induced as rapidly as possible, and for this purpose I would very much prefer the steam bath. At the same time the bowels should be moved freely by some such agent as pulv. jalapæ co. In the cases which depend upon nervous irritation a hypodermic injection of morphia, chloroform, etc., should be used. If this simple line of treatment be adopted, a very large proportion of cases will recover, and many of the children be saved.

Dr. I. Olmsted, of Hamilton, read a paper on

BRAIN INJURIES.

This paper will appear in a future issue of THE CANADIAN PRACTITIONER.

In the discussion which followed, Dr. J. E. Graham, of Toronto, said that Dr. Olmsted deserved the thanks of the meeting for the clear and lucid description of his case; he quite agreed with him in the diagnosis he had made. He spoke of the benefit obtained by the administration of iodide of potassium in large doses in tumors not syphilitic. This beneficial effect, however, was not permanent. Sooner or later, the unfavorable symptoms returned. He spoke of a case which he had under observation for seven or eight years, in whom he had at first suspected tumor of the cerebellum. That suspicion had, however, disappeared until a few weeks ago, when the patient returned with even more decided brain symptoms. He had observed three or four cases of cerebellar tumor which were verified by *post mortem* examinations. In one the symptoms were very similar to those of the patient under discussion.

Dr. Olmsted replied, and closed the discussion.

Owing to the absence of Dr. Greig, Toronto, through illness, his paper on "Disinfection after Infectious Diseases" was not read.

Dr. J. Duncan, Toronto, then read a paper on

WHOOPING COUGH TREATED BY ONE OF THE NEWER METHODS.

This paper was discussed by Dr. J. D. McDonald, Hamilton. (It will appear in a future number of THE CANADIAN PRACTITIONER.)

SURGICAL SECTION.

This section met in the examiners' room. Dr. T. K. Holmes, of Chatham, and Dr. Primrose, of Toronto, were appointed respectively chairman and secretary of the section.

Dr. A. B. Atherton, Toronto, read a paper on

SUTURING OF EXTERNAL POPLITEAL NERVE,

and presented the patient. Sensation had returned, but there was considerable rigidity in the knee joint.

Dr. B. E. McKenzie, Toronto, who had assisted Dr. Atherton at the operation, said that he had not seen the patient for some time, and now noticed considerable improvement in the circulation. He also stated that there was great difficulty in recognizing the ends of the divided nerve during operation, but that so far the result of this case was eminently satisfactory.

Dr. Powell, of Ottawa, congratulated Dr. Atherton on the result so far, and said that he thought further improvement might now be made before further contracture takes place.

Dr. Whiteman, of Shakespeare, said that judging from similar cases and results he would keep up continual rubbing and passive movement rather than forcible bending, which has been advised.

Dr. Holmes, of Chatham, said that when we consider the importance of the functions of the joint in maintaining the nutrition of the limb, we would conclude that massage is of little use in a long standing case of anchylosis.

Dr. Atherton, in reply, stated that, in his opinion, it would be dangerous to try forcible means because of the risk of interfering with the union of the nerve, which was in the first instance bound down in cicatricial tissue. He would rather favor massage and passive motion in the meantime.

Dr. MacCallum, of London, then read his paper on

CHLOROFORM INHALATION.

It was discussed by Dr. Moore, who reported a case of non-narcosis and inability to produce insensibility. Voluntarily stoppage of breathing occurred, and artificial respiration was resorted to. This condition continued for some time; finally the administration of chloroform was stopped, and the patient, after half an hour, began to breathe naturally.

Dr. Mullin, of Hamilton, asked why the tongue be not drawn forward. He thought the tongue should be drawn forward somewhat forcibly, as it excited respiration. He again thought that the tongue should be kept all the time well forward. He referred to a case of a drinking patient who was taking chloroform quickly. Patient suddenly became pale, pulseless, and respiration ceased. Result, death. In the case referred to by Dr. Moore, he would by pushing the ribs forcibly cause the patient to breathe.

Dr. MacCallum stated that, in his opinion, one should inject morphia in cases of spasmodic respiration. In Edinburgh they push the drug.

The Association met in general session at 8.30 p.m.

Dr. R. B. Nevitt opened the discusion in surgery, taking for his subject the

PRESENT STATUS OF ANTISEPTICS.

He was followed by Dr. T. K. Holmes, Chatham, who devoted his remarks to the sterilization of the field of operation—the hands of the surgeon and his assistants and of the instruments and dressings which come in contact with the wound. He pointed out the advantage of steam as a sterilizing agent, and showed how by means of Arnold's Steam Sterilizer it can be utilized to the best advantage. He also pointed out the best method at present known of disinfecting the hands by the use of permanganate of potash and oxalic acid after they have been thoroughly cleansed with soap and water. Recent experiments have proved the inefficiency of carbolic acid and mercuric chloride to destroy pathogenic germs on the hands when applied of a strength compatible with comfort, so that their use for this purpose must be abandoned, and the plan recommended adopted in preference to all others.

Dr. N. A. Powell, of Toronto, said that in regard to hand and wound-area cleansing, both mechanical and chemical, he advised that, in accordance with Schimmelbusch's suggestion, nail brushes should be boiled for five minutes in a one per cent. solution of carbonate of soda, and kept in a one to one thousand bichloride solution. Such brushes, used freely with green soap, get the skin into excellent condition for the chemical sterilization by solutions made with the tablets which we all now carry, or with the more perfect method worked out by Dr. Howard Kelly, referred to by Dr. Holmes. In sterilizing instruments carbolic acid solutions are no longer required, and the damage they do to the hands of the operator can be avoided. When Davidsohnin, 1888, showed that boiling for five minutes under pressure—that is, in a closed vessel—would absolutely sterilize instruments if they were properly constructed, we all began to test the method, and soon had samples of rusted and ruined instruments on hand. Then came the happy suggestion of Schimmelbusch that a one per cent. solution of carbonate of soda would prevent rusting, and on this we now rely.

Saturating a piece of gauze with a one to ten solution of glycerine and water was equally efficient with the soda carbonate in the prevention of rusting. A good many Ontario physicians had obtained the sterilizer from the United States at a cost of from six to ten dollars, when they could be bought in Toronto, where the patent was owned, for half that outlay. In the preparation of silk, Dr. Powell advocated fractional sterilization as suggested by Halstead. The silk on glass spools is simply placed in strong glass tubes loosely plugged with cotton and steamed for half an hour on each of two days in the steriliter, and no better or easier plan could be desired. As regards catgut, Dr. Powell prepares it by first scrubbing with green soap, then soaking in ether sulphate, then for twenty-four hours in a one to one thousand watery solution of bichloride and using it out of absolute alcohol. He never used large catgut but by this plan; the small sizes seemed to preserve their strength and aseptic condition indefinitely.

The Association was then addressed by Dr. H. O. Marcy, of Boston, president of the American Medical Association, on the "Anatomy and Surgical Treatment of Hernia," an address which was illustrated by blackboard sketches. (See page 273.)

Dr. Spencer, of Toronto, then gave a very interesting lantern demonstration of the newer bacteria.

The Association then adjourned.

(To be continued.)

PATHOLOGICAL SOCIETY OF TORONTO.

April 30th, 1892.

The society met in the Biological Department, the president, Dr. J. E. Graham, in the chair.

Dr. McKinnon, of Guelph, presented, through Dr. Peters, a tumor removed from the lumbar region, and the secretary read the following notes of the case:

SPINA BIFIDA.

Removed June, 1887. Boy then 6 years old. At birth the tumor appeared to be about an inch in diameter. When six years old, the boy appeared to be in perfect health, being able to play and romp about like any other boy of his age.

He had incontinence of urine, and very imperfect control of the action of his bowels. His limbs were well developed, and the only other inconvenience he suffered arose from the tumor, which now measured, from upper to lower margin, about fourteen inches, and, transversely, about twelve. He is bright and intelligent in appearance.

The excision was performed in June, 1887. The boy made a good recovery, and showed much better control over the bowels and bladder than before the operation. He attended school during the fall and winter till the following March. After an acute illness of ten days, he died from meningitis about the 30th March, nearly nine months after the operation.

Dr. Peters said this case was undoubtedly one of pure meningocœle; the cord was not at all involved, and the pedicle was less than one inch in diameter. It was not very clear what was the cause of the trouble with the bladder and bowels. Perhaps it was due to interference with the circulation in the ano-vesical centre caused by the weight and shaking of such a large tumor. It was strange, too, that the patient should die nine months afterwards from meningitis, when the operation wound had completely healed.

EXTRA-UTERINE PREGNANCY.

Fœtus and placenta presented also by Dr. McKinnon. The secretary read the following notes:

Nov., 1890. A young married woman, the mother of one child about 6 years old, was suddenly seized with agonizing pain in left side of the lower abdomen. It became gradually worse, and had continued for six or seven hours before she was first seen by me. She was then pale in the face, in great agony, pulse about 112, very feeble, and the abdomen tender and tympanitic. Under large doses of morphia she seemed to improve, her color returned, her pulse became full and fell to 88; but within 12 hours the ghastly pallor returned, the pulse lost volume and rose to 120, 130, 140, and at times could scarcely be felt. The tympanites increased. It was now evident beyond the shadow of a doubt that there was an internal hemorrhage, as was at first suspected. A prompt operation, in which I had the valuable assistance of my colleague, Dr. Howitt, disclosed the nature of the cause and controlled the hemorrhage. On opening the abdomen, a large quantity of blood, partly fluid and partly clotted, was found free in the peritoneal cavity.

After the operation the pulse was not perceptible for some hours, but the respiration was godo. She made an uninterrupted recovery.

Dr. Howitt said that this case was remarkable from the large quantity of blood and large amount of clot contained in the peritoneal cavity, and also from the situation of the fœtus, which was in the fimbriated extremity of the Fallopian tube, and so it might be called an ovarian gestation.

Dr. McPhedran asked what was the usual situation of the ovum in extra-uterine gestation, and what were the conditions of development outside of the uterus.

Dr. Graham asked if it was true that blood is always effused into the peritoneal cavity at the menstrual periods.

No reply was made.

PRIMARY CANCER OF THE LIVER, WITH DILATED STOMACH.

Dr. Fotheringham presented a specimen and read the following description (see page 274 in this issue).

Dr. John Caven questioned the correctness of calling this a primary cancer. He had examined the right lobe and found several small nodules which seemed to be of embolic origin, and they could hardly have been embolic from the large mass in the left lobe, but had more likely come from some small primary focus in some other organ. He asked if any explanation could be given why cancer of the liver was more commonly found in the right lobe than in the left, other than that the right lobe was the larger.

Dr. Peters also was doubtful if this was a primary tumor. There might be a very large secondary carcinoma from a very small primary focus, so that the primary tumor might easily be overlooked. He had seen a case which had been described as a primary cancer of a lymphatic gland, but in which afterwards a very small tumor was found in the breast. Of course there was no theoretical reason why cancer of the liver might not be primary, but it was very

rare. He would like to know the condition of the pancreas in this case, as the primary focus might have been in that organ.

Dr. Graham asked if pain had been a symptom in this case. The liver might be largely infiltrated with carcinoma without jaundice, but never, he thought, without pain.

Dr. McPhedran said the pain was due probably to implication of the structures outside of the liver substance.

Dr. Acheson said he had heard that pain was a prominent symptom in this case. In regard to this being a metastatic growth, might it not be possible for a primary carcinoma to undergo natural cure, leaving the secondary tumor as the only visible lesion?

Dr. J. Caven said he had seen such in a case of so-called "withering cancer" of the breast, where the tumor in the breast had been completely replaced by fibrous tissue, and the only carcinomatous nodules were the metastatic growths in the gland.

Dr. Fotheringham, in reply, said that he had looked carefully for any evidence of a primary cancer elsewhere, but had found none; there was, however, some slight abnormal condition of the pancreas; it had not yet been examined microscopically, but he did not think it was cancerous. Of the history of the case during life he knew very little.

TUBERCULOUS INTESTINE.

This specimen, with microscopical sections, was presented by Dr. Thistle, who gave the following history:

E. W., æt. 3 years. Admitted to Victoria Hospital, May, 1891. Condition, marasmus, together with conjunctivitis, corneal ulcer, impetigo, and purulent discharge from left ear.

Previous History: Healthy until mother died, when the child was improperly fed, and neglected in every way, suffering from diarrhœa and constant abdominal irritation.

Family History: Mother died of phthisis. Child did well in hospital and became quite plump, losing all trace of previous illness, and remained in good health until about the end of March, 1892, when she complained of abdominal pain, particularly at night. For some weeks prior to this had been losing flesh, had very little appetite, and was very subdued and silent. The tongue was thickly coated, breath very offensive, gums swollen, and lips dry and sore. Skin became dry and rough, and had lost its normal elasticity. Bowels constipated throughout. No blood or mucus in stools. Abdomen slightly distended. Slight tenderness on pressure, but child objected very much to examination. Knees were flexed and drawn up on abdomen. On palpation nothing abnormal could be felt over belly. There was marked tenderness of femora—a condition noted in a case of intestinal tuberculosis which occurred in this hospital some time ago—so much so that the slightest pressure on gripping the thighs caused the child to scream out with pain. This tenderness was not found in other bones.

Chest examined. Nothing abnormal in lungs or heart.

Temperature: About 102° daily, with fall to normal or slightly above. Continued that way throughout.

Diagnosis: Intestinal tuberculosis. Child wasted rapidly. Pain became much more severe, and all the symptoms already noted became more marked. April 25th: Convulsion occurred. Irregular respiration and pulse. Contracted pupils. Coma, and death.

Autopsy: Very extensive ulceration of bowels, annular in several places. Large ulcer in cæcum, with much infiltration. Mesenteric glands were very much enlarged, forming masses. No breaking down. Loops of intestine were found adherent in several places. Nothing abnormal in brain, lungs, or in any other part of the body.

ENLARGED PROSTATE AND HYDRO-PYONEPHROSIS.

Dr. John Caven presented a bladder with hypertrophied prostate, ureters widely dilated, and kidneys showing pyonephrosis. The bladder was extremely small and its walls greatly hypertrophied; the capacity did not exceed four fluid ounces. The prostate presented a median nipple-shaped projection, which one would suppose from appearances to be large enough to cause obstruction to the outflow of urine. The ureters were dilated to the size of a man's middle finger, and contained urine mixed with mucus and pus, as did the bladder also. The pelves and calyces of both kidneys

were sufficiently dilated to cause considerable atrophy of the kidney substance, the cause apparently being pressure of retained urine and pus. There was no urethral strictures. The history of this case obtainable was very deficient, he being a vagrant and dying in gaol. His age was about 45 years. There was no *intra vitam* diagnosis of bladder and kidney disease, as far as could be ascertained. The exhibitor found difficulty in explaining the occurrence of dilatation of ureters and kidney pelves along with contraction of bladder and hypertrophy of its walls and the prostate. Apparently the urethral and renal damage was of long standing, although the obstruction caused by hypertrophied prostate had not been sufficient to give rise to distension of bladder.

Dr. Cameron thought that the contractile structure of the bladder had been hypertrophied from overuse; frequent micturition, due to reflex irritation from the diseased pelvis of the kidney, together with a certain amount of obstruction from the enlarged prostate, would naturally cause hypertrophy of the muscular coat of the bladder. Dilatation of ureters he thought due to sphincter action of muscle fibres around urethral orifices. Several members objected to this explanation, as they could not see how it was consistent with the dilated ureters, and they did not think that frequent micturition would produce hypertrophy.

Dr. Caven, in reply, said the dilatation of the ureters in this case could not have been due to over-distension of the bladder, since the bladder was thickened and contracted, but might have been caused by the strong contractions of the hypertrophied bladder obstructing their orifices. He thought Dr. Cameron's view best explained all the facts. He remarked further that there were no cardio-vascular changes, and the condition of the kidney was secondary.

MALIGNANT DISEASE OF THE VERTEBRAL COLUMN WITH SOFTENING OF THE CORD.

Dr. J. E. Graham presented a case of Hodgkin's disease, lymphadenoma in the spinal canal and consequent central myelitis, and read the following history:

The patient, I. M., æt. 65, entered the Toronto Hospital, April 14, 1892. He enjoyed good health until the latter part of February. While lifting timber his back pained him, and he was obliged to cease working on account of it. He did not strain himself, but he then first noticed a backache. The pain afterward extended towards the hips and down through the legs to the feet. It was of a sharp, cutting character, and the condition was diagnosed as double sciatica. This continued for about two weeks, when these symptoms suddenly ceased. He then noticed a weakness, more particularly of the lower extremities, which gradually increased until he lost control of the lower extremities, and the paralysis is still present. The patient is a tall man, six feet in height, and before his illness weighed 176 pounds. His face is much emaciated and has an anxious expression. The eyes are sunken, conjunctivæ jaundiced, and a very characteristic cancerous cachexia is present. He complains of dyspeptic symptoms, nausea, flatulence, etc. Bowels are regular; fæces of a light color, with no blood or other abnormal substance. Liver and spleen somewhat enlarged; prostate enlarged; inner surface of rectum healthy. A slight systolic bruit, of a hæmic character, was heard at the apex of the heart. Pulse 104, small and tense. On microscopical examination of the blood, the red corpuscles were found regular in shape and size and formed into rouleaux. 2,500,000 red corpuscles were found in the cubic mm., and the white to the red in the proportion of 1 to 50. Respiration is abdominal in type. Breathing and voice sounds normal. Skin hard and dry. The lymphatic glands throughout the body were indurated and somewhat enlarged. Urine pale in color; sp. gr. 1021, acid reaction. No albumen and no sugar. A urethritis appeared a few days after he came into the hospital. There is almost complete paralysis of the legs, and paralysis also of the bladder and rectum. Superficial and deep reflexes are absent in the lower extremities.

Patient feels at times a burning sensation along the inner sides of both legs. Sensation is lost on the soles of the feet, all the toes, and as far back on the dorsum of the foot as the metatarso-phalangeal joint. He has also lost sensation of heat and cold over the same surface, as well as over the inner sides of the legs. General tactile sensation is imperfect, and delayed over the latter surfaces. The pupils react imperfectly to light, and somewhat better to distance.

A few days after admission to the hospital, patient became much worse. He appeared to suffer from acute septicæmia, high temperature, frequent pulse, and a rapidly deepening typhoid state. He died about ten days after admission.

Post mortem: A small soft tumor was found on the anterior surface of the ninth dorsal vertebra. When cut into, the soft tissue was found to extend into the body of the vertebra and through to the spinal canal.

The bodies of the eighth and tenth vertebræ were also diseased. A soft lymphoid growth was discovered in the spinal canal on the outside of the dura mater, corresponding in situatiou with that found anterior to the body of the ninth dorsal. The lymphatic glands throughout the body were enlarged and indurated.

A central myelitis was found extending from the sixth vertebra downwards to the conus medullaris. The softening involved the gray matter leaving portions of the lateral and posterior columns intact. Above the sixth dorsal the cord was quite normal.

On microscopical examination, the growth on the anterior surface of the ninth dorsal vertebra was found to be made up of lymphoid tissue, as also was that in the spinal canal. No examination has yet been made of the inner portion of the vertebra.

Taking into consideration the clinical history and the *post mortem* examination of this case, we would conclude that it was essentially one of Hodgkin's disease, or pseudo-leukæmia. The peculiar course followed by the disease was due to the fact that one of the lymphoid deposits formed in the spinal canal pressed on the cord and produced central myelitis. It is difficult to understand why such a comparatively small tumor should be the cause of such severe myelitis. There was, however, a decided obstruction to the movement of the cerebral-spinal fluid, as the membranes in the lower part were much distended. The septicæmia, which was the immdiate cause of death, might have arisen from urethritis, which followed catheterization.

(The following discussion took place under the impression that the tumor of the vertebral bodies was of a carcinomatous character, as was at first reported by Dr. Graham. After further microscopic examination, however, the neoplasm was determined to be lymphadenoma, and the author amended his report as above.)

Dr. Cameron said that from the history as related there should have been little or no doubt as to the diagnosis during life. Double sciatica was found in only three conditions: diabetes, spinal caries, and carcinoma. It was easy to exclude the first two. He thought the growth here must have originated outside the neural canal, and the condition of the cord was a secondary one, produced by pressure.

Dr. John Caven said if this was a primary cancer of the vetebral column, he could not see how it could arise unless we accepted Cohnheim's theory of the origin of neoplasms, for the structures of the column were all of mesoblastic origin.

Dr. Acheson thought that some embryologists now looked on the notochord as derived from the hypoblast.

Dr. Peters thought the growth might have originated in the central canal of the cord.

Dr. McPhedran said the existence of lymphadenomata and the condition of the blood rendered the diagnosis not quite so simple as Dr. Cameron was inclined to think it.

Dr. Graham replied briefly, and said he would have the tumor, cord, and membranes carefully examined by the microscope, and report further on the case at a future meeting.

CARD SPECIMENS.

By Dr. Graham, (1) Calculus in the spleen.

By Dr. Acheson, (2) Heart with vegetations on the aortic valve.

(3) Stomach and duodenum, showing a cicatrized duodenal ulcer and inflammatory thickening of the pylorus.

By Dr. Primrose, (4) Microscopical sections of villous growth of urinary bladder.

After nominations for the officers for next year, the society adjourned.

THE CLINICAL SOCIETY OF MARYLAND.

Baltimore, Md., April 1st, 1892.

The 265th regular meeting was called to order by the President, Dr. Robert W. Johnson.

Dr. Wm. S. Gardner read a paper upon

THE MECHANISM OF AXIS TRACTION FORCEPS.

A pair of forceps designed by the author were exhibited.

Dr. Frank Dyer Sanger read a paper on

DEATH FOLLOWING SUPRAPUBIC ASPIRATION OF THE BLADDER.

The patient was seventy-five years of age, white, large, rather fleshy, full habit. Had had trouble passing his urine for some time, but never retention. For three days he had suffered much pain in the region of the bladder, and could only pass a small quantity of urine at a time. Examination showed the bladder to be moderately distended, its summit about two inches below the umbilicus. A hot bath gave no relief. A number of strictures were found in the urethra; nevertheless a long curve catheter was passed as far as the prostatic urethra. Nothing could be passed further. Seven hours after the patient was first seen, aspiration was determined upon, as I felt sure the bladder would suffer if not soon relieved. A double inguinal hernia and a rather thick accumulation of fat over the pubes decided me to insert the needle well up. Having used thorough antiseptic precautions, I felt that I could pass the needle through the peritoneum with safety. About one quart of urine was removed from the bladder. A drop of blood followed the removal of the needle; the point of the puncture was covered with a strip of adhesive plaster, and the patient went to sleep. Next day his bowels moved freely, and he passed considerable urine, a part of which escaped into the bed and could not be measured. The morning of the second day after the operation he complained of pain in the lower part of the abdomen and tenderness. Bladder could not be felt; pulse somewhat accelerated; temperature normal. Toward evening abdomen became tympanitic, pulse more rapid, temperature 98, expression anxious, urine passed in small quantities. Bladder could not be made out. Opium given to relieve pain and heat applied to abdomen. Patient died next morning, 62 hours after the aspiration.

Post mortem: Needle had entered the abdominal wall two inches above the upper border of the symphysis pubis. A line of light extravasation marked the track of the needle through the wall and parietal peritoneum fold; further than this its track could not be positively determined, as the pelvic cavity was filled with blood. Dense adhesions bound the bladder in all directions which required considerable force to be broken up. There was considerable redness of the parietal and visceral peritoneum in the vicinity of the bladder. No pus or urine apparently. In freeing the adhesions about the bladder that organ was ruptured, and about one-half pint of turbid urine escaped. I removed the bladder and urethra *en masse*, but was prevented from further examination by friends who came to claim the body. I regret that I did not at least secure one of the kidneys, as it might have thrown some light on the cause of death.

There have been a number of deaths reported from suprapubic puncture for the relief of a distended bladder. Deneffe and Van Wetter in 1877 collected 152 cases of suprapubic puncture, with six deaths; eighty-seven cases of rectal puncture, with eleven deaths. I have not been able to find another case of accident from aspiration in the literature, though my search has not been by any means exhaustive. Deneffe and Van Wetter report fifty-seven cases of aspiration, with no accident, showing the improvement upon puncture. The case here reported proves at least that aspiration is not free from danger, and suggests greater circumspectness in its practice.

Dr. W. P. Chunn: In these cases of distended bladder by sticking close to the symphysis you can get into the bladder without striking the peritoneum at all, and this is what most operators attempt to do. In the case under consideration, some urine probably trickled out of the bladder and gave rise to peritonitis.

Dr. J. W. Chambers: I begin to look upon every case of greatly distended bladder in old men with enlarged prostate with a certain amount of apprehension. The condition is a dangerous one. The case in point is interesting from the amount of hemorrhage that followed a simple aspiration. The condition of the veins over the front of the bladder can be very aptly compared to the condition of the veins in front of the trachea, where we frequently meet irregular veins which give rise to considerable trouble in operations. In the present case, with an enlarged prostate interfering with the circulation, the veins on the anterior surface of the bladder were doubtless distended, and probably one of these varicose veins was punctured, giving rise to the hemorrhage. The peritoneum was probably infected by the needle, which became infected in the bladder. Ordinarily a puncture two inches above the symphysis, when the bladder is distended, would not strike the peritoneum, as there is then usually 2½ to 3 inches space between the symphysis and the peritoneal reflection.

Dr. S. K. Merrick read a paper on

IDIOPATHIC PERICARDITIS,

with report of two cases. The term idiopathic pericarditis is used by authors to define an inflammation of the pericardium (which may be acute, subacute, or chronic) not the result of any discernible preceding or concomitant pathological process. To eliminate every etiological factor in any given case, and by exclusion arrive at a diagnosis of idiopathic pericarditis, requires no little pains on the part of the practitioner. Not a few authors are skeptical as to its existence. DaCosta, while admitting its extreme rarity, says he has seen several cases about which he has had no doubt as to the diagnosis. It may be that the paucity of cases of this affection reported depends in no small degree upon the obscurity of the symptoms and latency of the affection, which may possibly be characteristic of this form of pericarditis.

Case 1: Widow, aged sixty; came under observation at the North-Western Dispensary in early part of 1887. Complained of pain in the precordial region, of great weakness and faintness on exertion, and that her hands and feet were always cold. She had had no acute illness for years. Never had rheumatism, nor any of the diseases which stand in an etiological relation to cardiac diseases. Her urine was examined and was found normal. Careful auscultation discovered no valvular lesions. All the valvular sounds were clearly audible, but weak. The apex beat was in the normal position, but lacked force. The diagnosis made was weak heart from malnutrition, the latter being due to some unknown cause. She was slightly jaundiced, her skin being very much like parchment. She grew gradually weaker and progressively emaciated, the coldness of the extremities reaching up to the elbows and knees. To the touch she was more like a cold-blooded animal than the

genus homo. Her urine was repeatedly examined, and was always normal. She entered the Maryland General Hospital in the fall of 1887, and died about three months later. The autopsy was held by the late Dr. E. R. Walker. The heart and lungs were removed, the latter being sound and free from adhesions to the pleuræ or pericardium. The valves of the heart were perfectly sound, but the walls of the heart were atrophied and thin, and on close examination there was found a uniformly adherent pericardium which could be peeled off. The whole organ was firmly compressed by the adherent sac. All other organs were normal except the liver, which on close examination was found to contain small points of scar tissue here and there, the sites of former localized hepatitis, no doubt. The coronary artery had doubtless been compressed by the adherent sac, and thus the nutrition of the heart had suffered.

Case 2: Widower, aged forty-two, salesman in clothing house. Admitted to the Maryland General Hospital Nov. 10, 1891. His health had been good till three weeks previous, when he had considerable pain about the precordia. Said he had no fever at any time. Temperature was always normal while he was in the hospital. Urine normal. Man had never had rheumatism nor any disease to which pericarditis could be referred. No apex beat discovered by inspection or palpation. No friction fremitus on palpation, On percussion, an increased area of dullness over lower cardiac region. Auscultation revealed the to and fro new leather sound, heard with increasing loudness as the ear approached the base of the apex. A rather loud aortic regurgitant murmur was heard in the second right intercostal space, the blowing character of which was in sharp contrast to the pericardial friction sound. I pronounced it a case of pericarditis with effusion, complicated with endocarditis and aortic valvular lesions. Dr. Street, who also examined the patient, came independently to the same diagnosis. The patient, a few days after coming under my care, disobeyed certain rules of the hospital and was dismissed, much to my regret.

Dr. W. T. Howard, jr., thought that the lesions described in the liver in the first case were suggestive of syphilis. If this case could be associated with syphilis it would be most interesting, as syphilis has never been set down as a cause of pericarditis.

Dr. Merrick: I could not exclude syphilis. There were no symptoms of syphilis as long as the case was under my care. The lesions were on the surface of the liver, and dipping down a quarter of an inch or so. Dr. Walker, who made the autopsy, thought they were the sites of hepatitis.

Dr. A. K. Bond: I have no doubt at all that Dr. Merrick's cases were cases of idiopathic pericarditis. One cause of pericarditis and endocarditis that might sometimes be mistaken for idiopathic is rheumatism where there is no associated joint pains. In a case under my observation this winter, I found signs of an old pericarditis. The patient told me that these signs had been present since childhood. She said she had never had rheumatism. As in infancy and childhood rheumatism sometimes manifests itself, not in joint pains, but by other symptoms, such as chorea, I asked the patient if she had ever had St. Vitus' dance. She replied that she had had several very obstinate attacks.

Dr. Charles O'Donavan quoted from Ziemsen, Loomis, Gowers, and others, to show the extreme infrequency of idiopathic pericarditis. In Dr. Merrick's first case very considerable trouble was found in and about the liver, and it seems hardly proper to record this as a case of acute idiopathic pericarditis. The second case was not the subject of autopsy, and is therefore incomplete. It is quite possible that some cause may have existed which was not detected. It is very plain, in my mind, that the first case was not one of idiopathic pericarditis.

Dr. J. F. Martenet: In ten years' special work in chest troubles, I have never come in contact with a case of idiopathic pericarditis. I should think that the first case of Dr. Merrick's was of syphilitic origin. I do not know that Dr. Merrick has eliminated chorea. We scarcely ever have a case of chorea persistent in character in which we do not have some trouble in the heart area. Dr. Osler says that one should look for troubles in the cardiac region associated with and following chorea. It seems to me that there must be some other affection, possibly early in life, that he has not traced out.

Dr. J. W. Chambers: It seems to me that the interest in Dr. Merrick's case is not so much the *cause* of pericarditis, but the fact that this woman died, and the principal lesion was in the pericardium. Lesions of the heart, endocardium, pleuræ, kidneys, and other organs, which are usually associated with pericarditis, were absent. "Idiopathic" is simply a waste-basket in which we throw things for convenience. Undoubtedly this trouble has a cause, but what the doctor means to say is that he could not find out the definite cause.

Dr. O'Donavan: I think Dr. Chambers' remarks are hardly *apropos.* The whole world is searching for a case of idiopathic peritonitis, and, as far as I know, they have not been able to find it. The same holds good as to pericarditis. It is hardly the thing to claim these cases as almost isolated cases of a very rare disease. Every case should be judged on its merits.

Dr. Norment: With Dr. Chambers and Dr. O'Donavan, I doubt if there is idiopathic anything, if by "idiopathic" is meant a disease without an underlying cause. The question of associating a previous illness with the case in hand is an interesting one. Dr. Howard said that he knew of no case in which syphilis has been recorded as a cause of pericarditis. If syphilis was likely to be a cause of pericarditis in the present case, it seems to me that it would have been the cause of it in a good many other cases as well, considering the prevalence of syphilis. If a man had syphilis twenty years ago, pneumonia ten years ago, typhoid or what not five years ago, and there is not a chain connecting these diseases with the disease that takes him off, it seems hardly fair to attribute lesions that are present to-day to something that happened long since. When we cannot say what is the matter, it is better to say that we do not know; and it is in this sense that the word idiopathic is used to-day rather than in a definite sense.

Dr. Merrick: With regard to syphilis, in searching over the authorities, I could not find syphilis as ever having been the cause of pericarditis. As to rheumatism in childhood, that is readily disposed of by the character of the adhesions, which

showed the trouble to be of recent date. I grant what the gentlemen have said of the extreme rarity, and perhaps the impossibility, of idiopathic pericarditis. All of Dr. O'Donavan's authorities acknowledge that such a thing may occur. DaCosta says there are cases in which the closest investigation has failed to show any assignable cause. In twenty years' practice, during twelve or fifteen of which I have had all the clinical material of the North-Western Dispensary, averaging four to six thousand cases in a year, I have had an opportunity of getting hold of such a case, if such a thing exists. Dr. Walker, who had made over three thousand *post mortems*, particularly noted this case in the hospital, and that was the reason an autopsy was held. The case was a unique one in Dr. Walker's experience.

Correspondence.

Editor of THE CANADIAN PRACTITIONER :

SIR,—In THE PRACTITIONER of the 16th of May a communication appears, signed "Juvenis" (from nowhere), *re* the opposition to the amendments of 1891 to the Ontario Medical Act.

As the communication was admitted to the columns of THE PRACTITIONER over an assumed name, more or less speculation has arisen as to its authorship. While some are inclined to think it not necessary to look outside the editorial management of THE PRACTITIONER for the author, others credit it to the "Ingersoll statistical pyrotechnist." As one of the many opposed to the medical legislation of 1891, I regard it a matter of very little consequence as to who may have been the author of the letter referred to, and also of very little consequence the views which its author expresses. However, this much I will say, if the object of "Juvenis" in making himself impudently offensive through sneering allusions to the Medical Defence Association was to obtain the applause of the dominant section of the Medical Council, he must have succeeded remarkably well. "Juvenis" appears to have intentionally ignored the fact that it is not so much to a "*mean* $2.00" assessment the members of the Medical Defence Association object as to the manner in which the Council has taken to enforce its payment, to the way in which the funds of the College are expended, and especially to the management and expenditure of the College being controlled and directed by members of Council *outside the reach of the medical electorate.* If I understand the feeling of the Medical Defence Association, it is not likely to be daunted by the sneering of "Juvenis," nor yet by any formal expression (however "unanimous") *engineered* by the *faithful* at the late meeting of the Ontario Medical Association.

"Juvenis" may rest assured that the Medical Defence Association is not likely to be extinguished by his shadow, that its list of membership has been greatly augmented on account of the shuffling tactics in the formation of the late committee of the Legislature on Dr. Meacham's bill, and that when the proper time comes the Defence Association will be found on the stand again to press for the repeal of the amendments complained of; failing which, a united effort will be made, the first opportunity, to effect through another source such changes as shall eventually redress the whole of the evils which a majority of the profession very justly and properly object to.

I happen to have a personal knowledge and a distinct recollection of the circumstances and conditions which led to the admission of the assessment clause into the Medical Act in 1874. At the time, the Council, through extravagance and bad management during the first few years of the operation of the Act, had got to the bottom of the treasury. Representations made to the late Hon. Adam Crooks in 1874, then Minister of Education, were that financial relief was an absolute necessity to carry on business and to secure examiners from the ranks of the profession, who could not be expected or induced to undertake the duties without some hope of reward, and that the necessity for the operation of the assessment clause would not be more than temporary. The profession, in return for willing and early assistance, was assured that quacks of all sexes, sizes, and conditions should be summarily suppressed; that a full report of the operations and expenditures of the Council should from time to time be furnished the members of the College; that the different territorial divisions should be fairly represented upon the Examining Board, etc., etc. To what extent have these promises been kept? Quackery is as rampant and flagrantly carried on now —even under the nose of the Council—as it has ever been; information respecting the speculative and other operations of the Council

has been carefully suppressed and concealed; and, so far as regards the territorial share in the examinations, the records will show what amount of fairness has been displayed. I have known the nominees of some of the territorial representatives objected to for no other reason than that they did not answer the purpose of the dominant section of the Council. At one time the domestic character of the candidate was at fault, at another want of qualification was put forth as an excuse, and so it went from the beginning. The territorial representatives in the Council are in the minority, in a measure powerless; and if a territorial man is not a pliant voter, and a sycophant to boot, he is not likely to be permitted, as the Council is now constituted, to do more than answer his name at the roll call and occupy his seat.

Can it be possible that a large majority of the profession will submit to being snubbed in this fashion, and at the same time pay an annual tax to be squandered at the will of the few? Time will tell.

W. COBURN.

Oshawa, June 10, 1892.

Miscellaneous.

THE ASSOCIATION OF MEDICAL OFFICERS OF THE MILITIA OF CANADA.—The first annual meeting of this association was held in the Canadian Military Institute on Thursday, June 2nd, at 2 p.m., President Dr. F. W. Strange in the chair. Among those present were Drs. G. S. Ryerson, secretary; A. A. Dame, W. T. Stuart, Baldwin, Moore, Elliot, Orton, Preston, Osborne, Rennie, Leslie, Rice, McWilliam, Saunders, McCrimmon, Grasett, Warren, Raikes, King, and Clark. After the constitution and by-laws, which were submitted by the secretary, had been adopted, the president, Dr. F. W. Strange, delivered his address to the association. For the past twenty-six years, during which the militia of Canada as at present organized has existed, the medical officer of a battalion, he said, has been but a regimental unit, and one of the objects of the formation of this association was to draw these regimental units out of their retirement, and by binding them together to give them their proper position in the military history of the country, and impart an interest and increased efficiency in the work in which they were engaged. The status and rank of the regimental medical officer, he said, also needed some consideration. The medical officer should be an officer in the ranks the same as any other officer, and length of service should be considered in his promotion, as is done with the militia officers. "Let us have surgeon-captains, surgeon-majors, etc., and the officers promoted according to length of service and qualification, and the injustice of chance will no longer assist the officer in obtaining his proper position in the militia." The most important object in the formation of the association, he said, was the purely professional aspect. The reading and discussion of papers on topics relating to military medicine, surgery, and hygiene has received no attention in Canada, and the contribution of papers on military matters will always be one of the main features of this association. Dr. Warren then read a paper on "Ambulance work during the Franco-Prussian war," and Dr. Daniel Clark, once Inspector of Surgeons in the United States army, contributed a very interesting paper on "Some brain wounds, with results."

In the evening a smoking concert was held at Dr. Ryerson's residence, when the officers of the Toronto Garrison were invited to meet the association. At the meeting following the secretary read, for Dr. Wm. Canniff, a very interesting paper on "Some Experiences of a Surgeon during the American War." Dr. Canniff was late assistant-surgeon in the Royal Artillery. The election of officers resulted as follows: Hon. President, Surgeon-General Bergin; President, Surgeon F. W. Strange; Vice-Presidents, Ontario, Surgeon V. H. Moore, 41st Brockville Rifles; Quebec, Surgeon Roddick, 1st P.W.O. Rifles, Montreal; New Brunswick, Surgeon-Major Connell, 67th Batt.; Nova Scotia, Surgeon D. A. MacGillivray, 94th Highlanders; P.E.I., Surgeon Jenkins, Garrison Artillery, P.E.I.; Manitoba, Surgeon G. T. Orton, 90th Winnipeg Rifles; British Columbia, Surgeon Duncan, R.C.A., Victoria; Treasurer, Surgeon Tracy, 49th Hastings Rifles; Secretary, Surgeon G. Sterling Ryerson, R.G., Toronto. It is likely that the association will hold a special general meeting at Ottawa in September, during the meeting of the Dominion Medical Association in that city. Ninety-one active members have joined the association.

PRIVATE HOSPITAL.—We are informed that Dr. Ryerson's Private Hospital for Eye and Ear Disease, to which attention is directed in our advertising columns, has been running satisfactorily for the last two years.

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THE

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EDITOR:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

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TORONTO, JULY 1, 1892.

Original Communications.

SUTURE OF THE EXTERNAL POPLITEAL NERVE.*

BY A. B. ATHERTON, M.D., L.R.C.P. AND S. EDIN.,
Lecturer on Surgery, Woman's Medical College, and Surgeon to St. John's Hospital, Toronto.

N.M., æt. 11, consulted me for the first time on July 22nd, 1891. A year before he had fallen from a bicycle and severely injured the left knee. The medical man called in at first took the case to be one of dislocation of the joint. Three weeks subsequently a consultation was held, and it was then decided that there had been a fracture of the lower end of the femur. An attempt was made under chloroform to rectify displacement, and the limb put up in a semi-flexed position. Two weeks after this the skin ulcerated over the outer condyle posteriorly, and the bone was laid bare. Later on an operation was done for the removal of dead bone. During the following winter the patient suffered from an attack of what was supposed to be inflammation of the bowels, which kept him in bed two or three months.

On examination of the limb, I found the following conditions present: Much wasting of the leg, with dropping of the toes and inability to extend them. Tendo-Achillis contracted, and tarsus and ankle stiff, and held in such a position as to bring the foot nearly in a straight line with the leg. Knee bent at an angle of about 150°, and moves through an angle 15°. A deep hollow in lower thigh just above patella, and a corresponding protuberance behind. He can hobble about a little with a stick, the toes of left foot merely touching the floor, with but little or none of the weight of body borne upon them. Sensation fairly good in leg and foot, except on the dorsum of the latter and of ankle. A feeling like an electric shock experienced when pressure is made on cicatrix over outer condyle. No pulsation felt in posterior tibial artery, and doubtful whether there is any in dorsalis pedis. Left femur one and a quarter inches shorter than the right.

July 2. *Operation.*—Assisted by Dr. B. E. McKenzie. An incision was made three inches in length over course of peroneal nerve behind knee. The upper end of the divided nerve was readily found to the inner side of biceps' tendon, its bulbous extremity being involved in cicatricial tissue at the site of former ulceration and operation for removal of dead bone. After much search we found a contracted cord, which seemed to answer for the lower end of the nerve, lying close to the head of tibia. The two ends of nerve were now cleared a little and a small bit cut off of each. Then they were united with two catgut sutures, the prominent portion of the outer condyle beneath nerve being previously chiselled off so as to produce less tension on united ends.

During the operation the internal popliteal nerve was exposed in the popliteal space, and seemed quite healthy. A continuous silk suture

* Read before the Ontario Medical Association.

was employed for the closure of the wound without drainage, and powdered iodoform, with salicylated cotton dressing, applied. Finally the left tendo-Achillis was divided, and the foot forcibly flexed upon leg. Adhesions were felt giving way in tarsus and ankle. The foot and leg were bandaged and placed on a pillow, the knee being well flexed.

July 24. Wound at the knee was redressed.

July 26. Doing well. P. 88; t. 98.6°; says his foot feels warmer than it has done for months. It is also moist, while, formerly, he states that the skin was always dry. Not much manifest improvement in sensation.

July 30. The dressings were removed from knee for the second time since operation, and the suture taken out. Patient can feel the prick of a pin slightly on dorsum of ankle and foot. A poro-plastic posterior splint was put on limb, with knee well flexed, so as to relax nerve, and a starched bandage applied over it.

Aug. 7. Allowed out of bed to-day. There is not much further improvement in sensation, but there seems to be a slight return of power in the extensor muscles of the toes. He can also evert the foot a little, which he was unable to do before the operation.

Aug. 13. With both feet resting side by side on the floor, while he is in a sitting posture, the anterior part of the left foot can be lifted about half as high as the right. Sensation over dorsum of foot is also improved.

Aug. 20. The splint was removed and reapplied, with the knee in a little straighter position.

Aug. 22. He left for home, with instructions to keep splint on for three or four weeks.

April 6th, 1892. Patient presented himself for inspection. Since the removal of splint six or seven months ago, he has been going about freely on the limb with the aid of a cane. The toes of the left foot now rest well down on the ground when he walks. Sensation seems to be about normal everywhere. Considerable hyperæsthesia exists over cicatrix behind outer condyle. The muscular power has considerably improved in parts supplied by the peroneal nerve. Some contraction of tendo-Achillis still present. The left leg has developed a little more, in comparison with the right, but is much smaller yet. The knee now moves through an angle of about sixty degrees, instead of fifteen, as at first. He cannot straighten limb much more, however, than formerly.

June 1. He says he continues to get about with more and more ease and facility. He can run with other boys, and has begun to ride a bicycle again a little. Can walk fairly well without his stick, but soon tires unless he uses it.

Remarks.—As cases of secondary suture of nerves are somewhat rare, I thought the report of the above case and the presentation of the the patient might be interesting to the Association.

During the last few years, as you well know, a considerable amount of more or less satisfactory work has been done in this field of surgery. Various methods of securing union of the divided nerves have been employed. Doubtless, when the ends are near together, as in my case, the simplest and best mode of procedure is to freshen the extremities and suture them directly with catgut, or perhaps silk. It is generally advised that one should pass the sutures only through the sheath of the nerve when it is of sufficient thickness to hold it. But as cases in which the nerve itself has also been included have apparently done equally well, it is doubtful if it matters much whether one adheres to this rule very strictly or not. I did not do so in the present instance, and indeed it would have been impossible to do so in dealing with the attenuated lower end. Other methods of bringing about union must be employed when the divided ends are not near each other. When the distance between them is not more than an inch, they can often be approximated by dissecting them up for some distance and freeing them from surrounding parts, the nerve at the same time being stretched a little, if necessary, before the sutures are introduced. In cases where even this plan fails to allow the ends to be brought into apposition, some have connected them by means of the strands of catgut used in their suture, and have trusted to these strands serving as a basis for nerve tissue being formed subsequently. A better method than this probably is that of inserting a bit of nerve taken from one of the lower animals, or from a freshly amputated limb. A fair measure of success seems to have attended this plan of operating, and it has now been made use of in several instances.

Dr. Gardner, of Australia, has recently re

ported a case of gunshot wound of the elbow in which he was able to bring together the widely separated ends of the ulnar nerve by dissecting the upper end from behind the inner condyle of humerus and carrying it across in front of that bone, so as to reach the lower end of the nerve by a short cut. This method is obviously only applicable to a very limited number of cases, but it is worth remembering, as it gave a satisfactory result in the patient operated upon by him. Still another way of filling in the gap between the ends of a divided nerve is that of splitting up the proximal portion, beginning just above its extremity and proceeding upwards a sufficient distance, then cutting across one of the halves and turning it down to attach it to the distal end of the nerve. When success follows any of these methods, sensation generally begins to return in a few days after the operation. The motor fibres, however, owing to their degeneration, take a much longer time to recover their lost function; often several months elapse before there is any return of voluntary power in the affected muscles. In the case reported some signs of their recovery seem to have occurred in the short space of two or three weeks.

In a large proportion of cases, complete restoration of muscular force *never* takes place, although improvement may not cease for two years of more.

With regard to the further management of the present case, I feel disposed to allow things to go on very much as during the last few months, or until all improvement ceases, both in the movement of the knee-joint and in the use of the limb. His leg will be massaged every day, and some attempt made to straighten the knee without the exercise of much force. I hesitate to forcibly extend the leg on the thigh as yet, for fear of disturbing the union of the divided nerve. This, I think, would be all the more likely to occur because of the lower end having been so much bound down by inflammatory adhesions at the time of the operation. The condition of the leg as a means of locomotion is so far superior to what it was before operation that I should be very sorry to run any risk of a return to its former helpless state. Although there is much manifest deformity of the knee-joint, and the patient is still in a crippled condition, he gets about with comparative ease, while when first seen the leg was simply useless as an instrument of progression; and if nerve connection had not been restored, the next best thing would have undoubtedly been an amputation at the knee-joint.

ANGINA LUDOVICI.*

BY G. L. MACKELCAN, M.D., HAMILTON.

Having read one or two articles in the London *Lancet* descriptive of this disease, and having met with three cases in practice, I venture to bring the subject before the Association in a very brief manner.

The etiology of the disease seems to be very obscure. It is said sometimes to arise from decayed teeth, and at other times seems to be epidemic. The text books scarcely mention the disease, only eight lines being devoted to it in Dr. Osler's work on "Practice of Medicine," which is, of course, up to date. Mr. Barker, in the *Lancet*, reports two cases in University College Hospital, and his definition of the disease is submaxillary cellulitis. It is essentially an acute inflammation of the areolar tissues beneath the deep cervical fascia. Dr. Lediard reports a case originating from a decayed wisdom tooth, which proved fatal from the administration of chloroform for the purpose of making the necessary incision for the evacuation of the purulent collection below the deep fascia.

The affection seems to prove most frequently fatal by way of pyæmia. Pus has been known to find its way down behind the deep fascia, where it is attached to the margin of the first rib, into the pleural cavity, constituting empyema with all its consequences. Therefore the necessity for an early opening of the pus cavity.

Case 1.—Was called to see Mrs. F. on Dec. 20th. Found her sitting up in bed, complaining of having caught cold and of a sore throat. She had been ill for three or four days. The throat did not show anything more than a little redness. On the left side of the neck there is a good deal of swelling, not like that of an inflamed gland, prominent and circumscribed, but underneath the jaw it is evenly hard and unyielding, and has a dusky, brownish-red color.

*Paper read at the Ontario Medical Association.

The swelling and discoloration extend down nearly to the clavicle. The temperature was never very much elevated, 102° being the highest point reached. The induration continued to spread slowly, but there was no fluctuation to indicate suppuration until January 1st, when there seemed to be a small point at and to the left of the median line, where there was slight softening of the hard mass. I therefore made an opening at that spot, only a small one, and found pus, which escaped freely under continued poulticing, and recovery was slow but sure, for the induration was a long time in disappearing.

I subsequently had two other cases, the notes of which I have lost, which ran a very similar course and were treated in the same way. My principal reason for reading this short paper is that the disease seems to be so little known and so often fatal.

Selections.

SCORBUTIC HÆMATURIA IN AN INFANT.

BY JOHN THOMSON, M.D., F.R.C.P. EDIN.,
Extra-Physician to the Royal Hospital for Sick Children, Edin.

The following case seems worthy to be put on record as being an example of an extremely rare type of infantile scurvy. The clinical facts are as follows:

J.E., aged seven months, brought from Leith on February 11th, 1892. The infant has been losing flesh and energy for two months, and for the last month his urine has been red. The parents are healthy and tolerably well-to-do. They are very careful of the infant, and his home surroundings seem, on inquiry, to be quite satisfactory from a hygienic point of view. At birth he seemed quite strong and healthy. From birth to the present time he has been given condensed milk. During the first week of life he had nothing else. Then for a month or two months he had barley water added to it. After that for about ten days he was given a little raw meat juice along with the condensed milk; but he did not like it, and it was therefore stopped. When the raw meat juice was abandoned (four months ago) he was given a pancreatised "infant's food," and on that, along with condensed milk and water, he has been fed exclusively since. He has been in the habit of vomiting about half of the food given to him. His bowels have always been regular and normal in their action. Of late he has been very restless at night; he has always sweated very freely on his head. He has never before had any illness, except that he was "feverish" and had a slight cough when his teeth appeared. About two months ago the infant was noticed to be very languid and to be getting thinner and paler. This has gone on steadily increasing. At the beginning of January the father, who was eating an orange, held it out to the infant. He made a wry face at first when he put his lips to it, but immediately afterwards he clutched hold of the orange with both his hands, and would not give it up until he had sucked a considerable amount of the juice. After doing this he was very sick. The parents were amused at his eagerness to suck the orange, but they thought they had made him ill by letting him have it, and therefore they have never allowed him to have anything of the kind since. About a month ago the urine was noticed to be bright red, and it has remained so ever since. The infant has suffered no pain of any kind, except occasionally "from wind." No special tenderness or bruise of any part has ever been noticed.

The infant is very languid and listless, with a pale, yellowish, earthy complexion; the gums are pale, and not at all swollen, and there are no ecchymoses on them. The lower central incisors are the only teeth through the gum. The fontanelle is large and the ribs beaded, but there are no further signs of rickets. The abdomen is normal; no tumor is to be felt, and the liver and spleen are not enlarged. The heart and lungs are normal; temperature also normal. There is no distinct tenderness anywhere on palpation or passive movement, but the child evidently dislikes being pulled about. There is no ecchymosis, and no swelling of any bone, or joint, or other part. The urine is of a bright red color. On standing, a copious reddish deposit takes place, but the clear urine which is left remains bright red; reaction acid. Much albumen found on testing with nitric acid and boiling. On microscopical examination the deposit is found to consist almost entirely of red blood corpuscles. There are also a few leuco-

cytes and blood-plates, but no tube casts, and nothing else of importance. The case was diagnosed as scorbutic hæmaturia due to improper feeding. The infant was ordered to have nothing but the following diet: (1) As much fresh cow's milk and barley water (equal parts) as he will take, every three or four hours; (2) a dessertspoonful of raw meat juice (prepared as advised by Dr. Cheadle) thrice daily; (3) a dessertspoonful of orange juice twice daily. No medicine.—Feb. 18th: For some reason the diet recommended was not given until the evening of the 13th. On the 14th the urine was quite free from any red color, for the first time for a month. On the 15th it was somewhat pink, but since then it has been quite free from any tinge of red. It is now found on examination to be perfectly normal in appearance; there is not a trace of albumen, and no deposit is seen with the naked eye or under the microscope. The mother reports that the child is "very much better." He sleeps better, is more satisfied with his food, and has stopped vomiting altogether. He is also "much cheerier." His complexion has improved greatly, and he kicks about his legs while being examined in a healthy way which contrasts strongly with his former lassitude.—21st: Improving in every way. "Just very well." Urine remains quite clear.—29th: Still improving in every respect, except that he is somewhat restless at night and sweats a little on the head. Ordered cream, to be added to the milk, and cod-liver oil emulsion.—March 14th: Sleeps well; sweating stopped. Oat flour once daily.—24th: Very well in every respect; has cut two upper incisors.—May 5th: Has continued to gain steadily in strength since last note, and now has a rosy complexion, firm limbs, and the general appearance of a thoroughly healthy child.

Remarks: The specially interesting and, so far as I know, unique feature of this case is the fact that, with the exception of the general lassitude, the hæmaturia was the only apparent manifestation of scorbutus present. And yet there cannot surely be any doubt whatever about the diagnosis, in spite of the entire absence of sponginess of the gums, periosteal hemorrhages, and the other well-known signs. Hæmaturia is a recognized symptom of infantile scurvy, although one which is met with only in a small proportion of cases. Dr. Cheadle reports* a case of "obstinate and unexplained hæmaturia," very like this one, which, however, was found to be associated with ecchymoses, œdema of the limbs, and sponginess of the gums, and which was clearly scorbutic. The absence of spongy gums in this case does not militate against the diagnosis, for not only is this condition not met with where there are no teeth, but Dr. Barlow has published† an undoubted case of scurvy in which two incisors had appeared (as in this case), yet the gums were quite unaffected. The diet in my case was one well fitted to produce scurvy. The child's craving for the juice of an orange is an interesting incident, and tends to confirm the diagnosis. A similar craving in an infant with scurvy, who clutched hold of an orange which was offered to it, and "then proceeded to souse its lips and nose in the juice," has recently been recorded by Dr. Northrup, of New York.‡ Finally, we have here, in a marked and satisfactory degree, the "most important diagnostic of all, definite and rapid amelioration by anti-scorbutic regimen" (Barlow).—*Lancet.*

CLINICAL NOTES OF PARALYSIS OF THE DIAPHRAGM.

BY C. W. SUCKLING, M.D., M.R.C.P.,
Professor of Medicine to Queen's College, Birmingham.

Paralysis of the diaphragm is a rare affection, but in my opinion it is frequently overlooked, though it may be easily detected if searched for. During the past year I have met with six cases. The first case, which I saw with Mr. Stanley, of Small Heath, was that of a young gentleman who had strained his neck over a horizontal bar in an athletic display. Within an hour he complained of numbness and weakness of his legs, and when I saw him these symptoms had increased. He had difficulty in swallowing, and scarcely any power of phonation. I found paralysis of the right half of the diaphragm, the left half acting but feebly. By keeping the patient absolutely at rest, and by careful feeding, with frequent application of a faradic current to the right phrenic nerve, the patient was kept alive. The diaphragm gradually recovered

* Artificial Feeding and Food Disorders of Infants, p. 193.
† Article "Scurvy" in Keating's Cyclopædia of Diseases of Children, vol. ii., p. 269.
‡ Archives of Pediatrics, Jan., 1892, p. 5.

power, and in six or seven weeks he was quite well. The lesion in this case was probably hemorrhage around the cord above the origin of the phrenic nerve, the pressure being greater on the right side.

The second case, which I saw with Mr. Hall-Edwards, was that of a young lady who was suffering from influenza, and I was called in on account of severe neuralgic pain in the right lower extremity. The pain was paroxysmal, and of such severity that morphine injections had to be given constantly. On my second visit I found the right half of the diaphragm paralysed. There was no dyspnœa and no alteration of the voice. We decided to apply a faradic current to the phrenic nerves, one pole being placed at the lower end of the anterior triangle in the neck, the other over the hypochondrium. The patient improved with this treatment for a day or two, then died quite suddenly. This was in my opinion a case of acute multiple neuritis, and the paralysis of the right half of the diaphragm was due to neuritis of the right phrenic nerve, the implication of the left nerve being the probable cause of sudden death.

The next three cases were all due to diphtheria, and were all fatal. I believe that paralysis of the diaphragm is the cause of the great majority of sudden deaths after diphtheria, and that only a few can be attributed to syncope. I believe also that in many cases the diaphragmatic paralysis is not recognized. Of the three cases, one was a man and the other two children. In all the cases paralysis of the legs was present, and there was no difficulty in recognizing the diphtheritic origin of the mischief, though in one case the sore throat had been very slight. While at rest in bed there was no dyspnœa, but phonation was very feeble and defæcation and micturition impeded. On examination of the abdomen the diagnosis was readily made. The hypochondrium on the affected side became depressed on inspiration instead of being propelled forwards, and by placing the hand under the ribs the non-descent of the diaphragm could be easily ascertained. There was compensatory overaction of the lower intercostal muscles and great enfeeblement of the breath sounds at the base of the lung on the affected side. In each case the right half of the diaphragm was chiefly affected, but I believe this is due to the presence of the liver on this side and to the inability of the weakened muscle to push the organ down, while on the left side the muscle can descend until quite paralysed.

In all three cases the paralysis was recognized a day or two before death, and special precautions taken, but in each case death occurred quite suddenly. One little boy was brought to my consulting room; observing the feeble cough and phonation, I had him stripped and examined the diaphragm; I found it paralysed. This enabled me to caution the parents of his grave danger, and I heard afterwards that he died suddenly the day after seeing me. If both halves of the diaphragm become paralysed, death ensues from asphyxia, and the fatality of diaphragmatic paralysis after diphtheria can easily be understood when we remember the severity of the neuritis which frequently follows diphtheria, some patients being paralysed for a year or more.

As to treatment I would recommend that every case of diptheritic paralysis be kept in bed from the first, and that plenty of nutritious food be given. Iron and strychnine should be administered in large doses. If weakness of the diaphragm is observed the patient should be raised in bed with pillows, so that the diaphragm may act more easily. A gentle faradic current should be used three or four times a day and blistering fluid painted over the course of the phrenic nerve in the neck. Stimulants should be given freely.

The prognosis of paralysis of the diaphragm after diphtheria is very grave, and its onset may possibly be prevented by keeping patients in bed and at rest whenever any signs of paralysis are present. The early recognition of paralysis of the diaphragm is very important from a prognostic point of view.

The sixth case was that of a woman, aged 37, who was admitted for a second attack of alcoholic paralysis. The hands and feet were dropped, and the usual symptoms were present in a typical manner. The diaphragm was observed to be paralysed, and the patient died suddenly a day or two after this observation. I am not aware that paralysis of the diaphragm has been previously observed in alcoholic paralysis, or that it has been noted as a cause of

sudden death, most of such deaths being attributed to cardiac paralysis. This case emphasizes the great similarity that exists between alcoholic and diphtherial paralysis, and as alcoholic paralysis is recognized as being due to multiple neuritis, the paralysis of the diaphragm being also due to neuritis of the phrenic nerves, we may reasonably infer that paralysis of the diaphragm after diphtheria is also due to neuritis of the phrenic nerves. In none of the above cases could a *post mortem* examination be obtained. —*Brit. Med. Journ.*

ON THE ENUCLEATION OF ENLARGED TONSILS, AND ON HEMORRHAGE FOLLOWING TONSILLOTOMY.

BY BILTON POLLARD, B.S., F.R.C.S.,
Assistant Surgeon to University College Hospital, and Surgeon to the North-Eastern Hospital for Children.

Ligature of either the common or the external carotid artery for hemorrhage after tonsillotomy is surely a very severe method of treatment, and one which would hardly be resorted to until (other plans having failed) the patient's condition was really critical. In the discussion which took place on Mr. Arbuthnot Lane's paper at a recent meeting of the Clinical Society, and in the two memoranda which have appeared in the *British Medical Journal*, the only alternative methods of treatment referred to were local pressure and styptics. There is, however, another plan which is surer and safer than either of them, and more in keeping with the surgical methods employed for the arrest of hemorrhage in other regions, namely, ligature of the bleeding vessel itself in the throat.

Two cases of alarming arterial hemorrhage after tonsillotomy have recently occurred in my practice, and in both of them the bleeding vessels were tied in the wound with complete success. As both the patients were young and very timid children, chloroform had been given, and it was most fortunate that it had been. The first case occurred at the North-Eastern Hospital for Children. The right tonsil had been enucleated with the finger, and very little bleeding had occurred. The left was excised with Mackenzie's guillotine. The throat at once filled with blood, and continued to do so as quickly as the blood could be sponged away. A sponge fixed on a holder was plugged into the wound between the pillars of the fauces, whence the tonsil had been removed. It was held there for some minutes, but, on quickly removing it, a momentary glimpse was caught of two jets of blood issuing from beneath the anterior and posterior pillars of the fauces respectively, and making a cross fire towards the centre of the throat. The wound was again tightly plugged with a sponge, and preparations were made for securing the bleeding vessels. After the throat had been mopped dry the sponge plug was removed quickly by an assistant, and one of the bleeding points was instantly seized with a pair of Spencer Well's forceps. The second vessel was picked up in a similar manner. In all probability the vessels might have been twisted with safety, but it was judged wiser to tie them, because, had torsion failed to check the bleeding, it would have been necessary to pick up the vessels a second time. There was no recurrence of the hemorrhage, and the patient recovered as rapidly as if no unusual bleeding had occurred.

The second case was encountered in the out-patient department of University College Hospital. There was only one spurting vessel in that case. It was picked up and tied in the manner just described.

In connection with this subject I should like to refer to a method of removing tonsils which appears to me to be but little known and less practised at the present time. I mean the enucleation method. The operation may be done in the following way: The surgeon places the tip of his forefinger between the upper and back part of the tonsil and the posterior pillar of the fauces, tears through the mucous membrane at that spot, and then peels off the tonsil from the wall of the pharynx until it hangs loose in the throat by a short pedicle attached to its lower and anterior part. The pedicle may be either torn through by twisting it or snipped across with a pair of scissors. The operation is often an almost bloodless one.

Although advocating enucleation as a most useful method of removing tonsils in suitable cases, I freely admit that Mackenzie's guillotine and a pair of vulsellum forceps are ideal instruments for performing the operation in the majority of cases. I usually employ them for the purpose, but sometimes they are unsuitable.

In some cases the tonsils, though very large and the cause of much obstruction to respiration, are so buried between the pillars of the fauces and so soft and friable that they cannot be drawn through the ring of the guillotine. The crypts are often at the same time very large and plugged with very septic concretions. Such tonsils may be partially destroyed and scarred by burning them with the galvano-cautery, but several sittings are required in order to do this satisfactorily. They may, however, be removed completely at one sitting under chloroform by the enucleation method which I have just described. I have practised this operation on many occasions, and have been very well pleased with it.

Lest I should be told that I am describing an old operation as a new one, I may add that I am aware that the operation of enucleation of tonsils is a very old one, and that it was reintroduced to the notice of the profession by the Italian surgeon Borelli in 1861.—*British Medical Journal.*

SLEEPLESSNESS.—Whether, as appears likely, sleeplessness is more characteristic of our own days than those of our predecessors, or that, in accordance with a scientific fashion, it is now more noticed, we certainly hear of its prevalence with somewhat startling frequency. The nostrums proposed for the cure of this disorder are numerous. Many, if not most of them—we do not for the moment speak of narcotic drugs—are empirical, and are cast upon the public intelligence without any conscious reference to causes actually at work upon the brain and other nervous tissues. It does not necessarily follow that they are valueless, and we should no more think of repudiating their ordinarily legitimate exercise than of refusing the occasional aid of such medicinal agents as may be trusted safely to discharge the same needful function. It is to be understood, however, that we would, wherever possible, avoid, and replace by simpler non-medicinal methods, even such occasionally useful aid. This attitude is but rational, if we consider that the true object of treatment is never by choice merely palliative, but curative, and for cure there is needed the detection and removal of an active cause. The revelation of the causes of insomnia is, indeed, no simple matter. Thus much, however, we may say—namely, that just as the state of the brain in normal sleep implies a quiescent cerebral circulation somewhat reduced in volume, so in those whose nights are habitually restless we shall commonly find a condition of cerebral vascular tension. This, let it be noted, is not incompatible with general anæmia or with defective brain nutrition. There is, indeed, nothing so conducive to local vascular congestion as the constant exercise of a weakened organ. Mental worry thus acts upon the jaded brain, and we need not wonder, therefore, that it "murders" sleep. The true means of relief is as clear as it is often impossible. In such cases, however, and still more in others where adequate, or even more than adequate, nutrition is maintained, we find a simple and ready antidote in physical exercise. Muscular activity, in fact, may be employed to balance nervous irritation. In it we provide a means of counter exhaustion. There is a transference of vascular excitement, and of tension, with corresponding relief at the site first affected. Further, the same process implies a stimulation of the general metamorphic energy and the removal from the tissues of irritant excretable products. This brings us to another cause of insomnia, particularly of that which we sometimes observe in the gouty and rheumatic. It is probably on the ground of removal of such superfluous substances that we must explain the salutary action of the traditional "night-cap" of hot water, or the boiled onion, a stimulant of the kidney, at supper. Where mental over-activity or irritation has to do with insomnia, the influence of change—that is, of change in thought—should have a trial. It is no doubt a blind groping after this remedy that induces some to read themselves asleep. Better in several ways is the practice introduced by the German Kant, who spent some time before he retired for the night in cutting off by an effort of thought each mental occupation of the previous working hours. We might, however, multiply the stock of remedies without meeting all possible needs. The desirable course for any sleepless unfortunate to adopt is obviously not to resort to sedative drugs to allay his distress, but to seek the advice of his trusted medical attendant and its remedy in the discovery and the removal of its cause.—*Lancet.*

DEATHS FROM THE SWALLOWING OF ARTIFICIAL TEETH.—The case reported in the daily newspapers last week of a police constable who met his death from the impaction of a set of artificial teeth in the neighborhood of the larynx should draw general attention to a danger to which many are daily exposed. It will be remembered that in this particular case the constable, summoned by the whistle of a comrade conveying a prisoner, whom there was an attempt to rescue, to the police station, came running up and took hold of the arm of the prisoner, but almost immediately fell to the ground. He was at once conveyed to King's College Hospital, but died on the way there. The *post mortem* examination revealed a set of false teeth impacted just above the larynx, and this had caused death from suffocation. The report adds that the teeth were of inferior make, and no doubt became loosened through the deceased running. Year after year there are recorded cases of death from swallowing artificial teeth, and probably many occur which are not reported or even suspected. As a rule, these artificial teeth are what is known as "partial cases," where a few teeth are mounted on a small plate, with clasps attaching them to two or three of the remaining natural teeth. These plates may be so ill-fitted as to be loose from the first, and thus easily displaced; but more often the supports—the natural teeth—decaying little by little, the hold of the plate becomes very precarious, yet so gradual is the loss of anchorage that the patient in some instances hardly notices it, and by means of the tongue and the opposing teeth of the other jaw keeps them in position, while the muscular movements are unconsciously performed. The danger in this latter class of cases is the greater because of the insidious growth of its cause. It has been urged that these small dentures ought never to be inserted, but this contention is hardly practicable; the dentist, however, should always impress upon his patient the necessity of seeking advice should they become loose, especially where they are worn during sleep. The extraordinary foolhardiness which is sometimes displayed in such a case is shown by the following history. A man wearing a gold plate carrying three or four front teeth attached by means of clasps to the bicuspids returned home one night after a carouse, and, in attempting its removal, allowed it to slip down his throat. After waiting patiently for three days he found, to his joy, that it has passed per rectum and he proceeded straightway to place it in its proper position. He saw his dentist a few days later, and told him that he had taken aperients, and passed a great part of his time looking for the lost teeth. The plate was green and slimy, but nothing could induce him to have it removed from his mouth or to have a frame made which would be impossible for him to swallow. However it is not always the small artificial sets which have been the cause of death by suffocation, for the pharynx is sometimes large enough to accommodate a whole upper suction case, and in the museum of the Middlesex Hospital there is a preparation showing a loin mutton chop, including the bone, impacted in the pharnyx, which is surely as large as anything made in the way of artificial teeth.—*Lancet.*

INCREASE OF CHOLERA.—Disquieting intelligence reaches us from the East regarding the increase of cholera. The disease for some time time past has been smouldering in Persia, but now accounts are forthcoming of its active appearance in that country and in Cashmere. The chief places affected appear to be Meshed, where the mortality is said to have reached 60 per cent., and Srinagar, where the deaths have ranged between fifty and sixty per hundred of the cases. These reports may be, and we hope are, unfounded and exaggerated. Nevertheless, grave cause for apprehension exists, the more especially as cholera is reported to have shown itself at Turbeti Sheikh Djami, a town on the Perso-Afghan frontier. This looks as if there were going to be an extension into Afghanistan, and thence into India. Thus, Western civilization is at present exposed to invasion by cholera at two points, viz., overland from Persia through Russia, *via* the Central Asian railway communications, and by sea from India, through the Suez Canal. With regard to the former, the Russian government is taking precautionary measures, chiefly of an administrative character, at Tiflis. It is satisfactory to learn that "sanitary precautions" are being taken at Djami. If these are carefully carried out in Afghanistan, the disease may not acquire an epidemic foot-

hold in our Indian empire. Without in any way anticipating the conclusions or agreements of the parties to the Venice Sanitary Conference, it is to be hoped that the combined system of inspection and disinfection that will be promulgated in the Red Sea will arrest any Indian cholera infection at its entrance into Europe. For us Europeans, therefore, there is yet ample time given to put our houses in order, and to afford no opportunity to the dread enemy to settle in our midst. Should cholera burst the barriers raised against it in Russia and at the Canal, its success in establishing itself in any country will be in inverse proportion to the hygienic condition of that country. All filth conditions, of whatever sort, and every kind of pollution of air, water, or soil, are the nidus in which cholera flourishes. All our efforts, therefore, should be centred in perfecting our sanitary defence against the disease, which appears at the present moment to be afflicting our brethren in the East. The death of Sir Henry Harrison and his daughter at Chittagong from cholera has been the subject of much regret, as he was one of the ablest members of the Bengal administration, and was instrumental in carrying out many of the municipal reforms in Calcutta of late years. It is stated that many Europeans died of cholera at Chittagong in March last, but the disease was supposed to have disappeared.—*Lancet.*

EFFECTS OF MEDICATED INHALATIONS.—Dr. A. Irsai, of Buda-Pesth, has made some instructive laboratory observations on the effects of the inhalation of various substances on the lungs and air passages. Almost immediately after a few inhalations of air impregnated with oleum terebinthinæ the lungs became pale, but regained their ordinary appearance on the readmission of pure air; a second administration of turpentine vapor was followed by the same appearances as the first. The cause of the pallor was doubtless a spasmodic contraction of the pulmonary vessels —probably due mainly to peripheral action. When oleum juniperi or oleum pini sylvestris was employed, results of a similar kind, but less in degree, were obtained. Oleum pini sylvestris, however, is a more powerful vaso-motor constrictor than oleum terebinthinæ. With eucalyptus, oleum anisi, oleum menthæ, and menthol scarcely any change was produced in the color of the lungs. With oleum thymi and thymol three or four inspirations were followed by a distinct reddening, which increased as they were continued. Creasote and, in a still greater degree, guaiacol produced redness, there being rapid relaxation of the vessels and great hyperæmia of the lungs. From these observations Dr. Irsai concludes that in acute catarrhal affections with swelling, hyperæmia, and profuse secretion, substances should be selected for inhalation which produce anæmia, and that in chronic torpid conditions, or in phthisis where the supply of blood and the nutrition of portions of the lung are defective, substances which induce hyperæmia should be used. Of course, it is needful to exercise due vigilance in employing creasote or guaiacol in cases where there is any tendency to hemorrhage.—*Lancet.*

THE
Canadian Practitioner
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Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, JULY 1, 1892.

CORONERS' AUTOPSIES.

The present system of choosing physicians to make the *post mortem* examinations for coroners is anything but satisfactory. It frequently happens that the autopsies are conducted in a very perfunctory style by men who are incompetent for such work. We do not wish to cast any slurs on the capacities of many able general practitioners who have made such examinations in Ontario during the last few years; but we believe it will generally be acknowledged that the time has now arrived when such work should be placed in the hands of skilled pathologists, when such can be found. In Toronto the coroners appear to think that all physicians are perfectly competent for such purposes, and that men who pay special attention to pathology, in some cases

making it the chief work of their lives, have indulged in superfluities as far as medico-legal cases are concerned.

Our friends in the Province of Quebec are setting us a good example in this respect. On Wednesday, June 8th, a deputation representing the Medico-Chirurgical Society of Montreal, waited upon the Attorney-General of the Province of Quebec and presented the following memorial on behalf of the members of the society:

At the regular meeting of the Medico-Chirurgical Society of Montreal, held Friday, May 27th, 1892, the president, Dr. Buller, in the chair, and forty members present, the question of appointing an expert for performing autopsies ordered by the coroner was discussed. The very inefficient and unsatisfactory manner in which, with a few memorable exceptions, such coroners' autopsies have been performed has been a subject of regret to all who desire to see this important work carried out in a satisfactory manner. It has been felt by members of the medical profession of Montreal that the ends of justice have been more than once defeated by the unsatisfactory way in which the work has been done. In most of the cities of the size of Montreal a thoroughly competent person with special training performs this work, and it is felt that the time has come when the city and district of Montreal should have the advantage of such special skill.

The following resolution embodying these views was moved by Dr. T. G. Roddick, and seconded by Dr. W. H. Hingston, and carried:

Whereas the city of Montreal is without a properly qualified expert to perform autopsies for medico-legal purposes; and

Whereas the present system of allotting coroners' autopsies to the physician most readily accessible at the time is such that it is impossible for any one physician to acquire the experience necessary to become an expert; and

Whereas the system adopted in European and most American cities, allotting all medico-legal autopsies to a specially qualified coroner's physician, has proved highly satisfactory;

Resolved, that the Government of the Province of Quebec be, and hereby is, petitioned to appoint some capable physician, thoroughly skilled in *post mortem* work, to act as coroner's physician for this city, and to perform all autopsies for medico-legal purposes within the city and district of Montreal.

F. BULLER, *President*,
KENNETH CAMERON, *Secretary*.

ONTARIO MEDICAL COUNCIL.

The recent meeting of the Ontario Medical Council, held June 14 to 18, was not prolific of any startling legislation of any kind. It was hoped that some strenuous efforts would be made to allay the hostile feeling that exists throughout the province with reference to the past acts of the Council. We regret to say that the members did not appear to be equal to the occasion, as practically nothing was done in this direction, excepting the adoption of the following resolution:

"Moved by Dr. Bray, seconded by Dr. Ruttan, that a committee be appointed by the Council to meet a committee and such other members of the profession as may choose to attend from among the promoters and supporters of the bill introduced into the Ontario Legislature by Dr. Meacham for the purpose of discussing any differences of opinion due to the recent amendment to the Medical Act, with a view to the better understanding of the said amendment and the restoration of the feeling of harmony that had existed prior to the said legislation, and should continue to do so between the profession and their representatives in the Medical Council."

This is well enough so far as it goes, but it comes far short of what was expected. The desires and objects of the supporters of Dr. Meacham's proposed amendment to the Medical Act, which was introduced into the Ontario Legislature at its last session, are well known to the members of the Council; and yet they do not consider it worth their while to express an opinion on any one point raised.

We are entirely opposed to many features of Dr. Meacham's bill, but we cannot shut our eyes to the fact that it contained certain clauses which are strongly supported by a large and powerful section of the profession in Ontario. We may go further, and say that the present constitution of the Council is not just and fair in the interests of the general profession. The numbers of "school men" are far in excess of what they should be when compared with the numbers of territorial representatives. This fact is simply incontrovertible, and well known to the Council; and yet its members had not backbone enough to take the question up, discuss it intelligently, and express an opinion on it. The Council may as well recognize the fact that the "Medical Defence Association," which includes a number of strong men, such as Drs. McLaughlin, Coburn, Sangster, Armour, Eastwood, and many others, are enthusiastic, united, and thoroughly in earnest. The do-nothing policy may stem the tide for a short time; but a more manly and dignified attitude is necessary to avoid defeat, if not disgrace, in the near future.

THE CURRICULUM OF THE MEDICAL COUNCIL.

There were but few changes made in the curriculum at the last meeting of the Council. The time for the acceptance of the matriculation examinations under the old rules, which required a four years' course, has been extended from July 1st, 1892, to Nov. 1, 1892. The object of this is to allow intending students to present themselves at the departmental examination during this ninth (July), and also the supplemental in September, and still come under the old régime. The effect of this change will be to postpone the working of the five-year regulation until 1893.

The students will be pleased at the decision to hold two examinations in the year as heretofore—one in April, and the other in September. Some slight changes have been made in the methods of conducting the examinations and paying the examiners. In the future it will only be necessary to have one presiding examiner present at each examination instead of two. There are few changes in the examining board. Dr. Albert Macdonald, of Toronto, will examine in Midwifery in the place of Dr. Wilson, and Dr. Small, of Ottawa, will take Materia Medica in the place of Dr. MacKinnon.

UNIVERSITY OF TORONTO SENATE ELECTION.

The next election for the Senate of the University of Toronto will be held in September. There will be four elected by the graduates in medicine. We understand that the graduates of Victoria College will have the right to vote. The present members are Drs. I. H. Cameron, A. H. Wright, L. McFarlane, and W. H. B. Aikins, and all are candidates for re-election. Drs. R. A. Reeve, A. B. Macallum, and Jno. S. Mullin (Hamilton) are also in the field.

AT a meeting of the trustees of the Johns Hopkins University, Baltimore, the following graduates of the University of Toronto were appointed fellows for the year 1892-3: Lewellys F. Barker (M.B. Tor., '90), Fellow in Pathology; Arthur P. Saunders (B.A. Tor., '90), Fellow in Chemistry.

Meeting of Medical Societies.

ONTARIO MEDICAL ASSOCIATION.

(Continued from page 286.)

Thursday, June 2nd.

THE MEDICAL SECTION.

Dr. Groves, of Fergus, in the chair. A symposium upon

THE PNEUMONIAS OF CHILDREN

was introduced by a paper by Dr. W. H. Henderson, of Kingston, on the "Diagnosis of Pneumonic Consolidation from Pleural Effusion," which was read by Dr. Wishart in the absence of the writer. This was followed by a paper upon

DIAGNOSIS OF LOBAR FROM LOBULAR PNEUMONIA AND OF PNEUMONIA FROM BRONCHITIS,

by Dr. H. T. Machell, Toronto. A paper on

PROGNOSIS IN PNEUMONIAS GENERALLY

was read by Dr. Wishart in behalf of Dr. A. Baines, Toronto. The discussion was opened by Dr. Powell, of Ottawa, who said: "I have long been of opinion that in the routine practice of chest disorders of children insufficient care is taken in the physical examination of the chest for the purposes of diagnosis, and too much is taken for granted. I speak now of ordinary, everyday work, and not of cases seen in consultation, or ones of special interest or importance. Speaking broadly, we may regard the sudden onset of a chest inflammation in a healthy, strong child to be lobar pneumonia, whereas the gradual onset of lung complication during the course of, or following, one of the exanthemas ought always to put us on the lookout for a lobular pneumonia. If, besides the sudden illness, we have short, sharp cough, rapid breathing, flushed cheeks, brilliant eyes, and, what to my mind is of great value, the facial expression of distress, and all accompanied by a sudden rise of temperature, we very fairly diagnose a pneumonia, though physical examination of the chest ought to be resorted to to establish the fact and should never be omitted. I consider the cardinal signs of pneumonia often wanting and rarely all present in children; indeed, the rule is, some of them are always absent, and those that are present are usually irregular.

The rigor cannot be depended on; it is rarely present, but in very young children its place is often taken by a convulsion which, in their case, may be taken as the analogue of the rigor in the adult. The pain in the side is often irregular; in a recent case under my care the pain throughout the illness was referred to the umbilicus. Finally, I consider it not always possible, and often impossible, to diagnose absolutely between lobular pneumonia and capillary bronchitis."

Dr. Saunders, of Kingston, said: "I would add to Dr. Powell's remarks as to the substitution of convulsions in children for the partial rigor in pneumonia that sudden and otherwise unaccountable vomiting is more frequent than even convulsions; either may replace the rigor, but vomiting probably does so the most frequently.

"With reference to the diagnosis between pneumonic consolidation and pleuritic effusion, I would lay stress, in the former, on the presence of bronchial breathing, which is absent in effusion without consolidation; also on the transmission of the cardiac impulse felt by the fingers placed on the intercostal space of the affected side; this is not felt when the thorax is filled with a consolidated lung, but is readily perceived if the thoracic space is occupied by fluid

"I would also notice the importance of delirium as a diagnostic symptom in inflammation of the apex of lung, in which it is almost invariably present, but not so frequent in inflammation of other parts."

Dr. Shaw, of Hamilton, was here called on to read his paper on

THE DIAGNOSIS OF LOBULAR PNEUMONIA, ACUTE AND CHRONIC, FROM TUBERCULOSIS,

and was followed by Dr. J. J. Brown, of Owen Sound, in a paper on the

TREATMENT OF PNEUMONIA,

and by Dr. H. S. Clarke, of Lucan, with a paper on

ACUTE SUPPURATIVE PLEURISY.

The discussion upon all these papers was then resumed. Dr. Oldright, of Toronto, said:

"Regarding pneumonia I will say nothing further than that I have found great benefit in several cases, at a critical period, from antipyretic doses of quinine.

"I have been much interested in the remarks of Dr. Shaw regarding the spread of phthisis. Whilst the most skeptical regarding the culpability of germs must now admit theoretically the contagiousness of pulmonary tuberculosis, we do not practically act upon the knowledge as we do regarding diphtheria or smallpox. We see patients spitting on floors and in handkerchiefs, the dried sputa being allowed to disseminate in the air. In Philadelphia, owing to the efforts of Dr. Dixon, notices were posted in the street cars forbidding persons spitting on the floors. Greater care should be taken to see that consumptives use a spit-cup, and that the sputa be sterilized. Boards of health should look after houses which have been inhabited by tuberculous patients, and see that they are thoroughly disinfected. If any person is skeptical on this point, I would refer him to the diagram of Whittaker in Sajous' "Annual of Medical Science," two or three years ago, showing at a glance the localization of phthisis, and the repeated occurrence of cases in houses occupied by successive families.

"In connection with Dr. Clarke's paper on empyema, I would again refer to the mode of treatment by the daily washing out of the pleural cavity, commencing as soon as pus is diagnosed, on the syphon principle, by means of a rubber tube placed in the wall of the chest. The advantage of this method is that the pleural cavity remains a closed cavity, the bellows action of the thoracic walls is not destroyed, and the expansion of the lungs during the period of recovery is encouraged.

"I can cite cases in which patients treated by this method have been examined years afterward by other practitioners, and no difference could be detected in the action of the lungs on either side. There is no danger of the tube slipping into the cavity, as in Dr. Clarke's cases, and the slipping out could be easily remedied by replacing the tube by one of a larger size if it should get too loose in the opening. Flocculent obstruction blocking the tube would be removed by moving the carbolized fluid to and fro in the syphon tube. Any flakes of lymph remaining in the cavity, becoming too large to pass through the tube, would do no harm."

Dr. H. A. Macallum, of London, said: "Œdema of the surface calls at once for surgical interference. It does not matter whether this is a pathognomonic sign of pus in the pleura or not. If it is, it calls for immediate surgical interference. If not, the pressure enough to produce stasis of the lymph vessels in the skin points to stasis of these in lung tissue, and there is an absolute demand for surgical interference. I do not believe in a possibility of pus in a pleural cavity without germs. These may be either pneumococcus, streptococcus, staphylococcus, bacillus coli commune, or bacillus tuberculosis."

Dr. Mitchell, of Enniskillen, said: "I am now treating two cases of suppurative pleurisy. One has been ill for nine weeks. The case began with pneumonia. The patient was aspir ated and two pints of pus withdrawn. A tube was inserted and the cavity was washed out by syphon method.

"The second, which was a case of pleurisy from the first, was ill four weeks. He was aspirated in fourteen days from the time he took the chill and seven and a half pints of pus withdrawn. As large flocculi were afterwards found in the cavity, a free incision was made and the case treated by the open method.

"The cases are both improving at present, but the outlook is not good on account of family history. "I believe in any case, no matter how treated, air will be admitted into the side; therefore I prefer treating by the open method with antiseptic dressings."

Drs. Powell, of Ottawa, and Arnott, of London, also made some remarks, and the discussion was closed by Dr. Machell, of Toronto, who, in reply, instanced the three hundred cases recorded by Holt, in which it was shown that delirium *per se* was not typical of pneumonia confined to the apex. Respecting the incision in suppurative pleurisy, Dr. Machell said that this should be free. In regard to the drainage tube, he said that he usually took a piece one inch long out of one side of an ordinary drainage tube, doubled it on itself, and so obtained a double drainage tube, which was secured from slipping in by an ordinary safety pin in the end of either tube. He seldom or never, unless indicated, washed out the chest cavity, but usually applied a good large pad of absorbent gauze; over this, tarred jute or carbolized tow; over these, a layer of rubber dam; and over all absorbent cotton and a binder. The rubber acted as a valve, allowing the secretions to pass out under it, but not allowing the air to pass in.

Dr. H. J. Saunders, of Kingston, then read a paper on

HERPES,

in the discussion of which Dr. Powell, of Ottawa, said:

"It is quite new to me to hear any attempt made to draw a similarity between zoster and the exanthemata, excepting in so far as the vesicles may resemble the vesicular stage of the eruption of variola. As to the pathology, it is generally admitted to be the result of an interference with the roots of the trophic nerves that pass into the roots of the spinal nerves from the spinal ganglia of the sympathetic. As to treatment, while many cases are notoriously rebellious, I have found the greatest benefit accrue from good doses of quinine—say, three or four grains thrice daily. Locally, I have found nothing better than olive oil, and I regard its value as due to its protective influence in guarding the eruption from air, and probably water too, which are both known to be obnoxious to eczematous eruptions."

SURGICAL SECTION.

The discussion on Dr. Macallum's paper on chloroform inhalation was resumed.

Dr. Charles Trow, speaking on chloroform inhalation, said:

"The hint thrown out as to cocaine being used to do away with nasal stenosis due to swelling of the mucous membrane is a good one. Throat specialists find the difficulty with cases who cannot breathe through the nose, especially those having adenoids; as soon as the mouth is closed the breathing stops. In some of these cases we have to hold the mouth open and pull the tongue forward. If, in spasm, a clot enter the larynx, we should be ready for a tracheotomy or an intubation. Strychnine hypodermically might act well as a heart stimulant. It is very necessary to feel the pulse frequently. In many of the German hospitals they make one of the students hold the pulse during the whole operation. Prof. Billroth's

anæsthetic is largely composed of alcohol, and the patients as much drunk as anæsthetized."

Dr. Arnott, of London, said: "The position taken by Dr. Macallum, that alcohol has an action analogous to chloroform, and that therefore alcohol should not be administered after chloroform, as it would be continuing the action of an anæsthetic, is a most serious statement. If this be true, then we have been acting on wrong lines and must have done immense harm by this course, not only after chloroform, but in medicine as well. A year ago I read a paper advocating the view that alcohol is not a stimulant in any dose, unless indirectly by its action in allaying nervous irritation and relieving pain. Last July Prof. Wilkes, of Guy's Hospital, opened a discussion on the subject before the British Medical Association. During the course of his remarks he incidentally said: 'Some antiquated physicians still retain the idea that alcohol is a stimulant.' In the discussion which followed the statement was not challenged. Prof. Whitla also, in his book recently published on materia medica and therapeutics, says that we will never understand the action of alcohol as long as we look upon it as a stimulant.

"With regard to which occurs first, asphyxia or heart failure, we must understand that asphyxia may occur while the patient is apparently breathing, but is really doing so insufficiently. All indications, therefore, of imperfect breathing should receive our careful and intelligent attention. This condition may go on for a length of time until we suddenly have blanching from heart failure. The *post mortem* reveals a dilated heart, clot in right heart, and blood very dark. Clinically we meet with two conditions, either lividity or blanching. Either one or both of them may occur early or late. When they occur early, the probability is that the cardiac and respiratory centres lying so close together have been paralyzed simultaneously. When they occur late, I am inclined to the opinion that asphyxia occurs first, assisting or causing the drowning of the enfeebled heart. Practically, we should in all cases secure the confidence of our patients, as cases often die from fright. This occurs when no anæsthetic has been administered at the first cut of the knife.

"We should carefully examine the blood pressure of every case, as this will often induce us to examine the urine microscopically, when we will often either discern disease of the kidneys or indications warning us of degenerations of the heart and other organs. Further, I believe that a slow or incomplete anæsthesia is always dangerous. A prolonged administration saturates the system with a large quantity of the drug, which, in case of accident, takes a long time to eliminate. Incomplete anæsthesia increases all the dangers from reflex irritation."

Dr. John Odlum, of Woodstock, asked if Dr. Macallum would invert the patient in all cases of suspended respiration. Do all patients who appear to cease breathing do so by the influence of the anæsthetic, or do some do so by force of will?

Dr. Macallum, of London, in his reply, said: "I do not object to pulling the tongue foward except when vomiting. The exciting effect of forcibly pulling the tongue forward can be as readily obtained by pinching the skin in exciting respiration. Spasms are not always voluntary. There seems to be in the medulla a 'spasm centre' which becomes excited and may lead to general convulsions. Push your chloroform here as in eclampsia in a midwifery case. I would, as a law, advise everting patients in the accidents of chloroform. One cannot tell always whether your asphyxia is primary or secondary—being due to a failure of circulation. Clinically they may look alike, and as a precaution all cases of asphyxia should be everted along with artificial respiration, as well as injections of strychnia. I agree with Dr. Arnott in thinking the beneficial action of alcohol is usually obtained by reason of its narcotic effect only in a narcotic dose, but disagree with him in thinking alcohol never a stimulant. Chloroform stimulates in the early stage the nerve centres, so may alcohol, but I will not suggest that either one is ever a heart stimulant. It is safer to administer chloroform in labor than elsewhere, because (1) there is a physiological hypertrophy of the heart, and (2) the full uterus presses on the abdominal vessels and partially prevents syncope. Watching the pulse constantly is useless; taking it occasionally does no harm, though the face is a better guide. If the abdomen contains a tumor be careful about everting your patient, for fear of this tumor

pressing on the diaphragm and partly inducing asphyxia."

The symposium on

HIP-JOINT DISEASE

was opened by Dr. Gibson, Belleville, with a paper on its early diagnosis. He was followed by Dr. G. A. Bingham, of Toronto, on Expectant Treatment; Dr. A. Primrose, of Toronto, on the Operative Treatment; and Dr. McKay, Ingersoll, on Mechanical Treatment before and after.

Dr. B. E. McKenzie, Toronto, followed with a paper on the

PREVENTION OF UNNECESSARY DEFORMITY IN HIP-JOINT DISEASE.

The discussion of the whole question was opened by Dr. Bingham, of Toronto, who said: "Traction is a prime factor in fixation of a joint. There is no objection to a patient going about with a fixation splint as soon as possible after operation."

Dr. Primrose, of Toronto, said: "Dr. McKenzie in his remarks referred to a case which had been submitted to the operation of excision and was now probably dying of pyæmia. I operated on the patient referred to, and wish to state that the case was one of advanced hip disease with the development of a large abcess when first brought under treatment. The condition urgently demanded surgical interference by operation, and an attempt was made by excising the joint to remove the disease and to secure free drainage. The disease was acetabular. The child's chances were undoubtedly improved by the operation, and the surgical interference is in no way responsible for his present condition. I hold that it is unfair to cite such cases as throwing discredit on operative procedure in hip-joint disease. The question really at issue is concerning the advisability of treating *early* hip disease by operation or by fixation apparatus. The case referred to by Dr. McKenzie proves nothing as far as the question under discussion goes. The child did badly, very badly, and one is not surprised that it did so. It is surely legitimate surgery to open an abscess when the patient is suffering acutely, and having let out the pus it is surely imperative for us to remove the cause of the suppuration if possible; if the cause lie in a diseased bone of an articulation, by all means remove it."

Dr. Dupuis said: "I have been practising all methods of cure for thirty years, the last eighteen years in the Kingston Hospital, and I see and hear nothing new to-day. I prefer a Thomas' splint for fixation of parts; traction on the limb by adhesive straps above the knee; elevation of the foot of the bed rather than perineal bands; constitutional treatment and operation for the removal of dead bone when this is present. This includes the whole treatment both past and present."

Dr. B. E. McKenzie, of Toronto, replied as follows: "I would call attention to the figures given by Dr. Bingham showing that about thirty-five per cent. operated on and recently reported by Dr. Poore have proved fatal, whereas Howard Marsh claims that by the expectant plan of treatment there is a mortality of less than ten per cent. One of the cases shown here to-day is a girl, the case having gone on to suppuration, and having discharged pus for some months. Treatment was carried out by means of the American traction splint for a little more than one year. Nearly two years have now passed since the removal of the splint and now there is no lameness or shortening, and the limb is but very little smaller than the other. Such a result cannot be obtained after operation. The most successful case is yet a maimed case after operation, and in nearly all of them there is much shortening and lameness. Dr. Primrose admitted that half the cases required the use of a stick to aid in walking after operation and recovery. The statement made that Dr. Bingham's case was allowed to be up too soon was based upon his remark that the boy was 'trotting around the ward' in three weeks after excision. Since Dr. Bingham explains that he was protected by the use of a Thomas' hip splint, the objection to his being up in that short time has been withdrawn. It was admitted by some of Parker's followers that up to the present time operative treatment has not given as good results as conservative treatment. I hold that when a joint is known to contain pus this should be removed and the wound treated antiseptically; extreme devotion to non-operative methods is as far from correct measures of treatment as are the methods of those who operate early in every case. Had this plan been adopted in the case above referred to, the girl could not have made the perfect recovery

which she has done. When due attention is given to the number of relapses that occur after operation, it will be seen that the gain in point of time saved is not so great as would appear. I would cite two cases operated on within the last fifteen months. One had the wound heal up without the appearance of any pus and was discharged from the hospital in good condition, but returned a short time ago having an abscess. The other, though having no sinus at the time of admission, was doing badly since the operation."

At 3 o'clock p.m. the Association resumed in

GENERAL SESSION.

The report of the Committee on Nominations was read by Dr. G. A. Peters, of Toronto. It was as follows: The Committee on Nominations beg to report as follows: President, Dr. Hillary, Aurora; 1st Vice-President, Dr. L. Brock, Guelph; 2nd Vice-President, Dr. Preston, Newboro; 3rd Vice-President, Dr. McKay, M.P.P., Ingersoll; 4th Vice-President, Dr. A. R. Harvey, Orillia; General Secretary, Dr. D. J. Gibb Wishart, Toronto; Assistant Secretary, Dr. I. Olmsted, Hamilton; Hamilton; Treasurer, Dr. Barrick, Toronto.

The Association then divided into Sections.

MEDICAL SECTION.

Dr. J. E. Graham, of Toronto, was called to the chair.

Dr. W. J. Wilson, Richmond Hill, read a paper on

DIPHTHERIA,

in the discussion of which Dr. Harrison, of Selkirk, said: "We owe a debt of gratitude to Dr. Wilson for bringing forward the facts he has given us. It shows that the poison of diphtheria may be carried by a person who has been exposed to the disease without having had it himself. With regard to disinfection, I think it is not yet settled what will surely kill the germ of diphtheria. Prudden says he subjected linen or cotton cloth in a bell-glass for twenty-four hours and found some of the bacteria still living, and could culture in suitable media colonies of them from the tissue. With regard to the cause of diphtheria, an interesting question is whether a case of diphtheria must be caused by a bacterium developed in a previous case. Sporadic cases where there has been no known communication with a previous case goes against this view; and though in the older sections of the country there might have been, as is said, cases of the disease perhaps years before in the same house, the germs of which have lain latent, in the newer parts of the country where the history of every house is known, as in my own neighborhood, this cannot have been the case. Yet I have known many cases where the house was new, the place recently cleaned, the occupants entirely isolated, and yet there have been marked attacks of diphtheria. If the idea of Prudden, that a single bacterium may cause in one case abcess, in another erysipelas, and in a third diphtheria, is correct, it might throw a light upon on this question."

Dr. C. A. Hodgetts, Toronto, spoke of a case occurring in the Nipissing District, where, some two years after diphtheria had been in the family of a settler, an old rug had been used to staunch the flowing blood in a cut foot. A diphtheria membrane developed, and one or two deaths occurred in the family from laryngeal diphtheria. Dr. Wilson replied briefly.

Dr. N. A. Powell, of Toronto, exhibited a case of

LANDRY'S PARALYSIS,

and read a paper thereon. The discussion was opened by Dr. Meyers, of Toronto, who said: "This case is very interesting from its similarity to multiple neuritis, in which a purely motor form is quite possible, as is seen in those cases formerly described as anterior poliomyelitis of the adult, but which are now generally acknowledged to be an affection of the peripheral nerves, and it is only by the exhibition of cases such as this, and the study of its pathology, that a distinction will finally be made between peripheral and spinal affections, since the careful examination of peripheral nerves has recently shown that several diseases of the spinal cord in which no definite lesions are found *post mortem* are really cases of peripheral neuritis.

Dr. McPhedran said that this case was a very typical one, the only symptom absent being disturbance of respiration; this was peculiar in view of the fact that both speech and deglutition were involved. There was much difference of opinion as to what cases should be included in Landry's paralysis. In most of the late re-

ported cases the nerves, as well as the spinal cord, were the seat of the lesion, and it would seem wiser to include all such so long as they showed decidedly the symptoms of acute ascending paralysis. In a case reported by Klebs last year there was found thrombosis of the anterior central artery of the cord and of its branches to the anterior gray horns, the nerves being all healthy; in some others there was disease of the anterior roots of the nerves or of the nerves themselves; in many micro-organisms being found in connection therewith. In the present case, in view of the absence of wasting and disturbance of sensation, and the normal reflexes with unchanged electrical reaction, there is little doubt that the spinal cord is the seat of lesion. For the same reason the multipolar cells of the anterior cornua must have escaped; the only part of the affection of which would account for the symptoms would apparently be the terminal plexus, in which the fibres from the brain terminate in the gray matter of the cord.

Dr. J. E. Graham related the history of two cases which had occurred in his practice during the last few months, both cases of myelitis, which closely resembled that given by Dr. Powell.

In the first case the course of the disease was almost identical, with two exceptions. (1) The electrical reaction to the galvanic current was abnormal in quality, and electro-irritability to the faradic current was lost in the most of the muscles affected. The temperature was raised for the first two or three weeks of the attack. The patient is now recovering. In the second case death occurred after four days' illness though involvement of the medulla. *Post mortem* examination revealed intense engorgment of the vessels of the anterior horn of the gray matter throughout the whole length of the cord, but much greater in the cervical and lumbar regions. Extravasation and inflammatory softening existed in the same situation. These changes produced a decidedly pink color, which could be at once appreciated by the naked eye. From a study of these cases compared with those of Landry's paralysis, I am of opinion that in the latter disease the lesion was in the same region, but of a somewhat different character.

The discussion was closed by Dr. Powell.

Dr. G. H. Burnham, Toronto, read a paper entitled

A CASE OF RHEUMATIC AFFECTION OF THE EYES TREATED BY PILOCARPINE.

This will appear in a future number of THE CANADIAN PRACTITIONER.

Dr. A. C. Meyers, Toronto, followed with a paper on

SYRINGOMYELIA.

Dr. J. E. Graham, in discussion of this paper, said: "I have noticed in the cases I have seen that the hands present an abnormally large appearance. This is principally owing to the atrophy of the muscles of the arm and forearm. I would ask Dr. Meyers if he has observed this in his cases? In a case of central myelitis recently under my observation, there was an absence of the power to distinguish between heat and cold over parts where the tactile sensation was fairly good. The posterior portion of the cord was found to have been more affected than the anterior.

Dr. James Thorburn, of Toronto, read a paper on

SOME POINTS IN LIFE INSURANCE.

The discussion was opened by Dr. Mullin, of Hamilton, who thanked the writer for the paper and spoke of the importance of some of his conclusions.

Dr. J. E. Graham, of Toronto, was of opinion that in many of the cases of so-called functional albuminuria the precipitate was not really albumin. Reagents were often used which precipitated other compounds—peptone, for instance. The only reliable test which always at hand was heat and nitric acid.

The Section then adjourned.

SURGICAL SECTION.

Dr. Temple, of Toronto, took the chair in the absence of Dr. Holmes. Dr. Meek, of London, opened with a paper on

VENTRAL HERNIA,

and Dr. Dupuis, of Kingson, followed with one on

OPERATION FOR THE RADICAL CURE OF HERNIA.

The discussion on these papers was opened by Dr. H. O. Marcy, of Boston, who said: "I owe my thanks to Dr. Dupuis for his valuable contribution upon one of the most interesting subjects that surgery ever presents for discussion. I am especially interested in his remarks upon the

use of the caribou-tendon suture, and, with the permission of the Section, I will confine myself to the subject of the animal suture, which is so very important in its application to the cure of hernia.

"As a student of Mr. Lister, I became deeply interested in the use of catgut as a ligature, and unsuspectingly used it for years as a trustworthy material for sutures. Sepsis which may have resulted I attributed to other causes. Engaged in a long series of bacteriological investigations, I took occasion to test specimens of catgut, the thicker varieties of which, although for a long time immersed in carbolic oil, were shown to be septic, and bacterial cultures were made from them. A careful study of the material in its preparation for musical purposes showed that such general conditions were exceedingly probable, and at the same time explained the reason why catgut was oftentimes so troublesome in its application because of its pulpy swelling, and, when knotted, was so untrustworthy on account of the ease with which it loosened.

"About fifteen years ago I sought for material better as a substitute for the catgut ligature and suture. Knowing that from time immemorial the Indians had sewed their skins with "animal thread," I applied to this source for information. In the teepees of the Sioux of the far northwest, the squaws instructed me as to the sources and preparation of their suture material, which was generally taken from the broad fascia of the shoulders of the buffalo, but sometimes from the long tendons of the leg of the moose and caribou. This was carefully sun-dried immediately upon removal from the animal, and kept dry until required for use.

"In 1882 Dr. Simmons, of Charleston, S.C., sent me beautiful specimens of tendons with long, fine parallel fibres, taken from the tail of the fox squirrel, but these were too short and fine for general use. I at once instituted a careful investigation of the caudal appendages of various animals, in a considerable measure with ludicrous and disappointing results. Reasoning from analogy that the kangaroo should furnish a distribution of tendons not unlike those found in the squirrel, I interested an Australian friend to investigate the subject and send me specimens. These proved far more satisfactory than the tendons of any other animal, and, indeed, furnish the ideal material for ligatures and sutures. The different varieties of animals called by the general name kangaroo, the opossum of the Southern States, the squirrel, and the common rat, so far as known, are the only animals which have this remarkable distribution of parallel tendons running to the extremity of the tail. They are each attached to a separate fasiculus of muscle, and in anatomical construction are independent. Twenty-five or thirty parallel tendons are found in each animal, and they vary in size and length proportionate to the animal's development. Many are sufficiently fine for the most delicate surgical use, while others are quite too large for any purpose, but are generally capable of subdivision, although rarely as satisfactory as the undivided tendon, which is uniformly even and round. They vary in length from eighteen to thirty inches.

"For years I had very great difficulty in obtaining a supply of tendons sufficient for my own use; but through a few publications in the press of Australia and through the mercantile houses engaged in the collection of kangaroo skins, I have established the collecting of tendons in a regular way. At first they were very expensive, I having paid sixty dollars a hundred in Australia for the tendons as collected by the hunters. They are now, however, furnished in a quantity ample for general use, and can be supplied, properly prepared, at a cost of about the sum of ten dollars per hundred, not much in excess of the cost of catgut. The histological structure of the connective-tissue sheath of the intestine from which catgut is made is interesting. The fibres are generally obliquely disposed, interlacing with each other so as to admit of easy extension and contraction in order to accommodate the bowel in its ever-varying degree of contents. That this connective sheath may be separated from the other coats of the intestine, it must be macerated for days until it becomes a seething mass of putrefaction. This, in our own country, is saved by the butchers, and furnishes the sausage skin of trade. In Italy, where the best catgut for musical purposes is prepared, it is made from the intestine of the sheep. A cork armed with short knives is drawn through the sheath, sub-

dividing it to produce the requisite size for musical purposes. The cement substance which binds together the connective-tissue cells is by this method necessarily softened, and it becomes everywhere invaded with bacterial infection, which may escape destruction in the subsequent methods of preparation for surgical purposes. It is only with the greatest care in keeping catgut perfectly dry that it serves its purpose for musical uses. However, for surgical purposes it must ever be considered as a wet, softened material. When in this condition it is yielding, soft, and comparatively weak, and the comparison is not far-fetched between the spinning of silk into a fine thread, weaving it into a delicate fabric, cutting it into diagonal strips, and twisting it in order to manufacture a cord, instead of keeping its fibres parallel. In the tendon, the strongest tissue in the animal economy, the fibres are constantly maintained parallel, and when properly preserved and prepared are aseptic and trustworthy. The knot is firm and unyielding as in silk; aseptically applied it is unirritating, and is slowly absorbed to be replaced by new connective-tissue cells. Silkworm gut is unchanged in the tissues, and, as wire, remains as a foreign body, or must be removed. Silk is encapsuled and not absorbed, and, even when aseptically applied, frequently becomes an irritant, and when buried in the tissue is often eliminated months after as a foreign body. As the profession come to understand the advantages of the use, in the daily widening field, of buried sutures, the value of tendon for this purpose will be appreciated, and I hazard little in predicting that the day is not far distant when the surgeon will feel the necessity of providing himself with a supply of trustworthy suture material."

Dr. Marcy exhibited to the Section specimens in considerable variety of the tendons of the kangaroo.

Dr. Meek replied briefly. Dr. Dupuis also pressed the use of the kangaroo tendon.

Dr. J. F. W. Ross, of Toronto, read a paper entitled

HYSTERECTOMY WITH AND WITHOUT A PEDICLE, A CRITICAL REVIEW FROM CLINICAL HISTORIES.

Dr. Lapthorn Smith, Montreal, opened the discussion by referring to the mistake frequently made in ascribing the formation of adhesions to electricity. Dr. Smith cited a case which, he considered, proved that electricity was not the cause of adhesions. One drawback in the operation without a pedicle was that adhesions were likely to form, and adhesion of the bowels was a very serious matter.

Dr. Atherton, of Toronto, said: "I think we ought to vary our treatment to a certain extent. When the tumor is not overly large and has not, probably on that account, formed a good pedicle, in such cases total extirpation may be necessary. In a large tumor with well-formed pedicle, the old method of operation by extra-peritoneal method is still the best. I think electricity is of value, but I am not a complete convert to the method. We must not discard any form of treatment too summarily."

Dr. Temple, of Toronto, considered the subject of hysterectomy of great importance. "There is a danger," said he, "of hysterectomy becoming fashionable, though probably it will not be so popular in the future. A considerable number of cases of fibroid of the uterus can be treated successfully short of hysterectomy. I have seen four cases of mania after hysterectomy. We should consider each case carefully, and the removal of the appendages should first be tried. Cases very hemorrhagic might call for hysterectomy. The intraperitoneal pedicle is preferable to the extra-peritoneal."

Dr. Ross, in reply, said: "I do not think that one or two cases will prove the statement made concerning the non-injurious effects of electricity. I believe that certain cases of fibroids are best left absolutely alone, though perhaps a little ergot may be administered."

The Section then adjourned.

THE EVENING SESSION.

The session opened at 8.15.

Dr. Oldright, Toronto, exhibited a patient who had suffered from

FRACTURE OF THE BODY OF THE SCAPULA,

and made some remarks thereon.

Dr. Harrison, of Selkirk, had seen a similar case many years ago, where the injury had resulted from the striking of the back upon the dashboard of a carriage when being thrown out.

Dr. Mitchell, of Enniskillen, opened the discussion in therapeutics, taking up

THE THERAPEUTICS OF CONSTIPATION.

He was followed by Dr. McKinnon, of Guelph.

Dr. Acheson, of Toronto, read a paper dealing with new remedies.

The remainder of the session was chiefly occupied with routine work, the presentation of reports of committees, etc. The President then having vacated the chair, it was taken by Dr. Mullin, of Hamilton, and the following resolution was moved by Dr. Williams, of Ingersoll:

"That the thanks of this Association are due and are hereby tendered to the retiring President, Dr. R. A. Reeve, for the able manner in which he has conducted and expedited the business of the Association for the past year."

This was seconded by Dr. Mitchell, of Enniskillen. Carried.

Dr. Reeve expressed his thanks to the Association.

Dr. Reeve resumed the chair, and regretted that, owing to the absence of Dr. Hillary, he could not introduce him to the Association, and declared the Association adjourned.

Correspondence.

Editor of THE CANADIAN PRACTITIONER:

SIR,—If you have space in THE PRACTITIONER for the following advertisements I would think it a good procedure to print them *seriatim*, for the purpose of calling the attention of the profession to what is going on in our fair Ontario, with the best medical legislation in the world. The laity see these advertisements constantly, and are induced by them to pour money nto the pockets of the advertisers. The Council must be aware of their existence, and wink at this monstrous imposition both on the public and profession; for, as yet, it cannot be prevented.

I have always been a stickler for our Medical Council, and have paid my yearly assessments without grumbling at anything but the arrant quackery which all the while prevails. I listened with the utmost attention and interest to Dr. Williams' eloquent address at the Medical Association in Toronto in justification of the proceedings of the Council, and agreed with him in nearly all his points. I listened to a discussion by the Medical Association also on the iniquity of advertising, some of the speakers almost holding it an offence to put one's card in the newspapers, and yet *cui bono*? Members of the Association may voluntarily refrain from making their professional business prominent; but incorrigible men, who have neither the fear of the Council, nor of the Association, nor of the prosecutor before their eyes, will do as the following advertisements prove, and denote what medical knowledge they may possess to the one object of making money in a way that other professional men would scorn to practise.

It seems to me that if the profession would express their views decidedly on this flagrant breach of medical ethics, the Council would bestir itself to find a remedy. And the following are not the only advertisements that fill the newspapers or are circulated about amongst the community; their name is "legion."

THOS. P. DUPUIS.

Kingston, June 9, 1892.

[We publish with pleasure the above communication from Dr. Dupuis, but have not space for the insertion of the advertisements. We may say, however, that one of the delinquents was struck off the register at the last meeting of the Council, and we hope the others will soon receive due attention.—ED.]

Personal.

IT is said that the staff in the new Medical Faculty of Queen's University, which has absorbed the Royal College of Physicians and Surgeons of Kingston, will be as follows: Medicine, Drs. Fowler (dean), Henderson, and Herald; surgery, Drs. Sullivan and T. Dupuis; anatomy, Drs. Garrett, Mundell, and Ryan; obstetrics, Dr. K. N. Fenwick; pathology, Dr. Anglin; otology, laryngology, etc., Dr. Connell; biology and physiology, Dr. Knight and Dr. Cunningham; chemistry, Prof. Goodwin and Nicol.

DR. J. E. GRAHAM, of Toronto, sailed for Europe, June 19th.

DR. MARTIN, of Toronto, has returned from England.

Therapeutic Notes.

TREATMENT OF ABORTIONS.—It is not exactly decided by authority how these cases should be conducted. One authority will advise patience, while the next dogmatically preaches immediate interference. Grigoriantz' analysis of 60 of his abortions treated showed 3.7 morbilitat, and nothing of mortalitat. His treatment is: douche 2 or 3 times daily, secale or ergotine, iodoform tampons if hemorrhage is severe. If ovum and membranes do not yield at once he dilates, or if open to admit fingers he removes, after which the curette is applied, and the internal wall of the uterus cleared off. Out of the 60 cases treated, 39 were separated by the instrument. The manner of using the curette in the uterus must be carefully performed. After finding it slip in, pass it methodically from side to side, examining every part of the internal surface. In no case has he had any untoward results. In ordinary cases he uses a 3 per cent. carbolic lotion. If temperature high:

℞.—Sublimate . . .	0.1
Acid, Carbolici . .	20.1
" Borici . . .	40.1
" Salicylici . .	5.0
Zinci Chlorati . .	10.0
Aq. Distilati . .	2000.0

—*Medical Press.*

HYPNOTIC EFFECT OF WARM BANDAGES.—Warm baths, as is well known, produce a calming effect, and tend to bring on sleep, and Alldorfer has attempted to apply such a method in patients where a sedative effect is desired and yet where a bath is inapplicable. His method consists in wrapping the lumbar region and belly with linen cloths soaked in warm water, and then covering them with oiled silk or rubber cloth, so as to prevent evaporation, while the whole is kept in place and loss of heat prevented by a flannel cloth. This procedure is of ready performance, and the author says that by this simple means he has obtained the most astonishing results in the treatment of insomnia. By dilating the large vessels of the intestinal tract, by the warmth applied, a condition of anæmia of the brain is produced, favoring sleep. These large intestinal vessels have very properly been termed the waste-gates of the circulatory system.—*Jour. de Med. de Paris.—Med. and Surg. Reporter.*

ICHTHYOL.—Among cutaneous diseases, Dr. Charles *(The Lancet,)* found ichthyol, in an ointment of two to ten per cent., especially valuable in burns of the first and second degrees and in scalds. Externally and internally, it was very efficacious in erythemata of unspecified nature. Several rapid cures of chilblains were obtained by washing with hot water and ichthyol soap, and subsequent application of ichthyol and turpentine, equal parts; of ichthyol and glycerine, equal parts; or of ichthyol, three parts, glycerin, water, and dextrin, all ten parts. In intertrigo it was also useful, as well as in zoster and in eczema, in acne and acne rosacea, in sycosis and in psoriasis. He also found the ichthyol treatment very efficacious in boils, carbuncles, and erysipelas.—*Medical and Surgical Reporter.*

IT is generally assumed that the decomposition of salol, a compound of carbolic and salicylic acid, in the alimentary canal is effected by the pancreatic secretion. More recent observations by Dr. Gley, published in the *Semaine Médicale*, show that the compound is broken up even in animals experimentally deprived of the pancreas. We must, therefore, look elsewhere for an explanation of this phenomenon upon which the therapeutical value of salol depends.—*Medical Press and Circular.*

GLYCERINE administered by the mouth is quickly absorbed by the lymphatics, and notably by those going to the hilus of the liver and to the gall bladder; it is a poweful cholagogue. Given in large doses (1 oz.), glycerine arrests the pain of hepatic colic, and when given teaspoonful doses daily in a little alkaline water it prevents a recurrence of the attack.—*Medical Press and Circular.*

NERVOUS ASTHMA.—Prof. Da Costa recently treated with marked success a case of pure nervous asthma with one-fourth grain of cocaine per diem. After obtaining the desired result the remedy was only given twice afterward, and but once a day.—*St. Louis Clinique.*

THE CANADIAN PRACTITIONER is printed for the Publishers by Messrs. BROUGH & CASWELL, 14 to 18 Bay St., Toronto. Messrs. Brough & Caswell make a specialty of fine office stationery for Physicians' use, and of announcements, calendars, etc., for medical institutions. Correspondence solicited.

THE

CANADIAN PRACTITIONER

FORMERLY "THE CANADIAN JOURNAL OF MEDICAL SCIENCE."

EDITOR:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

☞ Business Management, - - THE J. E. BRYANT COMPANY (Limited), 58 Bay Street.

TORONTO, JULY 16, 1892.

Original Communications.

HYSTERECTOMY WITH AND WITHOUT A PEDICLE: A CRITICAL REVIEW BASED ON CLINICAL HISTORIES.*

BY DR. J. F. W. ROSS,

Gynecologist, Toronto General Hospital and St. John's Hospital for Women.

For many years ovarian tumors were left inside of the abdomens of the poor unfortunates who carried them to their graves, after many tappings. To-day the weight of opinion is against such an apparently innocent procedure as tapping. Ovarian tumors that have never been tapped and that have never been the seat of inflammation can be readily removed in five or six minutes. No operation in surgery is simpler. Ovarian tumors that have been tapped or left so long that they have repeatedly become the seat of inflammation *cannot* be readily removed in five or six minutes. Such operations will tax the patience of the operator and the endurance of the patient. *Fibroid* tumors that grow, as they very frequently do, from a pedicle, or that fill up, as they frequently do, the fundus uteri, if they have not been left so long that they have repeatedly become the seat of inflammation or have not been tampered with (not by the trocar, but by the electrode), *may* be readily removed by an experienced operator, not, it is true, in five or six minutes, but at least within an hour. Fibroid tumors that have been left to inflame after child-birth or miscarriage, after the use of electrodes introduced per vaginam or through the abdominal wall, fibroids that have become firmly adherent, can *only* be removed with *great* difficulty, and at times *cannot* be removed at all. Early operation for ovarian tumors is now the fashion, and rightly so. Ovarian tumors were said by the older authors to do but little harm, and patients were advised to have no graver operation than a tapping done—a temporary but grateful relief. It has for some time past been the habit of the profession to advise against the removal of fibroid tumors of the uterus, not because they could be tapped from time to time, but because they were supposed to be innocuous and to disappear at the menopause as readily as the stars do at the uprising of the sun. Instance upon instance has been quoted of patients suffering for years with fibroid tumors, suffering with pressure pains, with hemorrhages, with inflammatory attacks; going around with distended bellies carrying in their abdomens tumors that may suddenly take on some cellular change that will imperil the possessor as much as if she had a charge of some deadly explosive in her abdomen; and yet because such patients drag on a miserable existence, and because operation for the relief of such a condition is believed to be extremely hazardous, they are advised to let nature take her course. In no other instance is such a surgical blunder made. As the experience of any one becomes extended, he must be convinced that if operation for the removal of

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fibroid tumors of the uterus is improved so that the mortality in experienced hands is not excessive, operation is in most cases the correct procedure. I am now referring to cases in which removal of ovaries and tubes will be either too dangerous or of no avail. I believe that in dealing with large tumors that are growing rapidly or are so large that much handling will be required to remove the ovaries, and in dealing with the multinodular tumors where the uterus is filled with nodules and where hemorrhage is excessive, the operation that will give the most satisfactory results is that of hysterectomy. When a woman has an ovarian tumor we do not say to her, "There is great risk in removing your tumor;" but we say, "Your tumor must come out." We know well that it may perhaps be an intraligamentous cyst with terrific adhesions or a case of double ovarian tumor with equally dense adhesions, but do not say so to the patient. Our fibroid tumor may be removed much more readily than our ovarian tumor, and yet we advise operation in the one case and advise against it in the other. Having now satisfied ourselves that we cannot be mistaken in our diagnosis—for we never are mistaken if we never see inside of an abdomen—feeling that we know a pus tube when we feel it, that we know the difference between an ovarian tumor and a fibroid, that extra-uterine pregnancy cannot fool *us*, that we are quite familiar with the dermoid cysts, we now calmly advise tentative measures, and look about for remedies that are, at the best, but palliative. Our patients suffer on, and pass from hand to hand until at last they offer themselves on the surgical altar as a sacrifice. And how often does it prove a sacrifice! And why does it frequently prove a sacrifice? Because the surgeon is called to finish up what others have failed to complete; and only after the patient's health has been undermined, after desperate adhesions have formed, after suppuration or decomposition has begun in the tumor, and after the kidneys have become disorganized by pressure on the ureters.

I have seen good surgeons explore an abdomen, and, because they found their suspicions that the patient was the possessor of a fibroid verified, close the incision. I have seen surgeons handle large tumors in the endeavor to remove ovaries and tubes, and consume more time over this operation than would have been consumed by a complete hysterectomy in the hands of any one familiar with the operation. And only into such hands should such cases fall. I never attempted to do a hysterectomy until I had assisted others to do a large number of them. And each case presents some new feature not presented by any of the others. There is no operation in the whole range of surgery from which the patient gains greater benefit, and there is no operation in which fatal blunders may be more easily made. The ureters are at times eccentric in the course they pursue; the bladder may be drawn far out of its normal position, reaching even to the umbilicus; the rectum may be adherent far up the tumor, and all of these must be protected from injury. A cool head is required. No operation requires more deliberation and knowledge of all its details, and yet with al rapidity of execution. The instruments used must be of the most approved patterns, and must always be ready to hand and aseptic. On the spur of the moment I have seen some terrible clamps put on these pedicles, veritable makeshifts, and of questionable cleanliness. When I have used the small serre-nœud, it goes at once to the silver platers before it is used again. Sponges are also a source of danger from the very urgency with which they are called for. Hemorrhage from adhesions is frequently alarming because we are unable to constrict the pedicle or to apply artery forceps to effectively control hemorrhage from such large vessels on the wall of a solid semi-elastic tumor. Hence sponge pressure is called for, and when the usual dozen sponges are all in use more are called for, and may not be aseptic as they should be; therefore a double supply of sponges should always be carried if there is the slightest shadow of a suspicion that what is begun as a probable ovariotomy may end in a hysterectomy.

Having now led up to the necessity for operation, let us look for a moment at the dangers of the old method by the clamp. After the clamp was abandoned in performing the operation of ovariotomy, the mortality diminished to such an extent that the reason of the diminution was easily apparent. Following in the footsteps of the pioneers of this operation, the abdominal surgeons attempted to remove fibroid tumors by dropping the pedicle, but

with signal defeat. Small pedicles submitted to such treatment, but the larger ones were not so tractable. They oozed, they bled, they sloughed, and refused to be so tenderly dealt with. A wire was then put about them and they were forced to remain outside of the abdomen. Many operators meet with remarkable success by this method, but the continued anxiety and worry of always looking, like Micawber, for something to turn up forced one of the most successful operators of this century to abandon operation and to again seek for palliative measures. The operation then received a blow from which it has not yet recovered. Other vaunted remedies were tried, as they were tried by our ancestors long years ago. Our ancestors failed, and we have failed to cure by these means. Enthusiasts stepped in, and the medical profession blindly followed. Anything to avoid the knife. An operator was avoided as if he had been a murderer, and he only received the crumbs that fell from the rich man's table. He was forced frequently to operate for glory or the love of humanity. It was an uphill fight. The fight was felt by many to be a fight against an unsurgical operation, an operation that left a dirty sloughing mass sitting on a dirt-abhorring cavity. On this continent, Eastman reported his success by the no-pedicle method. I had myself written up such an ideal operation, but had not as yet performed it. The trend of European thought was in the same direction. Krug then took up the operation, and he, with Eastman and myself, felt convinced that the pedicle must go. At Richmond I brought the subject up for discussion before the Southern Surgical and Gynecological Society in November, 1891. Those who had done well and brilliantly with the clamp remained conservative, but were interestedly awaiting developments. What I said before the Michigan State Medical Society last month, when invited to describe the no-pedicle method, I may repeat here: "I will never do another abdominal hysterectomy with an extra-abdominal pedicle as long as I live if I can operate by this other method. I feel that this operation will be the one generally adopted before another five years are over. I can heartily recommend it." For the purpose of analysis, I select three cases done by each method, and will endeavor to review the period of convalescence without prejudice.

Case 1. A fibro-myoma, the size of a man's head, with a pedicle formed by cornua of uterus after tying the broad ligament in which the tumor had developed with a chain suture on its outer side. The abdomen became distended shortly after the operation, but the flatus was expelled when the flatus tube was passed. This distension is evidently due to traction on the rectum by the pedicle. This distension disappeared on the fifth day. In this case a drainage tube was used above the point at which the pedicle was fixed, and was removed on the fourth day. Irritability of the bladder came on, and was troublesome. Clamp removed on the nineteenth day. In this case the temperature twice reached $100\frac{3}{5}$, and the highest pulse was 86. The pulse usually ran at about 65, and was unusually slow.

Case 2. A case of pregnancy and fibroid; fibroid weighing about thirty-five pounds. Pregnancy of five months' duration. Clamp and pins placed in lower angles of wound. Symptoms of distension set in very soon after the completion of the operation. What appeared to me to be obstructive vomiting set in, and enormous quantities of fluid were thrown up. It seemed as if the whole intestinal tract took part in the reverse peristalsis. An enormous number of enemata were administered, together with calomel, Seidlitz powders, magnesia sulph., cathartic pills, but without effect. I began to despair; but with all this vomiting the pulse ran at 66 to 90, clearly indicating that it was not due to peritonitis. The temperature at about 99°. To me the temperature is but a poor indicator, but the rapid pulse always makes me feel uneasy on two points, viz., hemorrhage or sepsis. Obstruction is generally at first accompanied by a moderately slow pulse and a slight, if any, rise of temperature. Peritonitis is always ushered in by a rapid pulse, let the temperature be either high or low. No drainage tube was used in this case. The pedicle sloughed above and below the clamp, and left an enormous hole to granulate from the bottom after the clamp came off on the twenty-first day. As the stump became putrid the temperature began to rise, and with it the pulse. Septic diarrhœa, a septic gastritis and enteritis and passage of undi-

gested food, set in. The temperature only reached 102°. During the septic period the patient slept badly. Eczema of the skin around the pedicle became troublesome in spite of the use of mildly alkaline and antiseptic unguents. Albumen appeared in the urine, together with fatty and granular casts on the twelfth day. The urine was reported as normal before operation. She suffered much abdominal pain even after the removal of the clamp and made a slow convalescence, having just barely escaped with her life. My anxiety was great, and continued until after the clamp was removed. After this period large gray sloughs came away from below the seat of constriction.

Case 3. A case of fibro-myoma about the size of a child's head. Pedicle fastened with pins and clamp in lower angle of wound. Drainage tube used above this for four days. In this case the hemorrhage was troublesome from the stump. Though tanned thoroughly, the blood would ooze out of a pedicle almost as hard as bone on the surface. On two occasions I was hastily summoned to find the patient covered with blood-stained dressings. The nurse becamed alarmed and sent for me. I never encountered such an obstinate pedicle. If left untightened for an hour or two, it would bleed. Everything went well, with the above exception, until the sixth day, when the temperature rose to 103° and pulse to 100. Septic diarrhœa set in, accompanied by distension. The motions became greenish in color and offensive. The patient then went into what I call the typhoid condition of the second week. She lost rapidly in flesh and barely escaped with her life. Subsequent convalescence was very tedious. An abscess formed around the pedicle. After the clamp was removed on the seventeenth day, a large hole remained to granulate from the botton, and sloughs came away from below the site of compression.

We now review three cases done by the no-pedicle method:

Case 1. Had been previously operated on by another surgeon, but had only one ovary removed. Tumor was very adherent. Had a mitral heart murmur and was not robust. The operation was a difficult one, but with Trendelenburg's position, vaginal staff, and a Wood's hernia needle, I soon managed to remove the uterus. There was some hemorrhage from adhesions deep in pelvis, and iodoform gauze packing was required to control it. This was removed next day. The pulse and temperature rose at once to 100 and 102° respectively. Cough was troublesome from the irritation of ether. The greatest amount of disturbance of pulse and temperature occurred during the first few days subsequent to operation, and then everything went along smoothly. The patient made an easy convalescence, though affected with extreme nervousness for some time. She is not yet free from this nervous condition, due to the induced menopause. The wound healed by first intention. The stitches came away from the vagina, as did those tied on the broad ligaments.

Case 2. Operated on two years previously. Ovaries and tubes removed, but hemorrhage and pain continued. The operation was very difficult, and could not have been completed by any extra-peritoneal method. The patient was very anæmic before operation. The pulse was 100 when she left the table and 120 an hour later. The discharge of serum through the gauze packing in vagina seemed excessive. For the first few days the pulse ran high; I attributed this to the great anæmia and excessive discharge of serum. The pulse reached 148 on the second day, and remained above 130 for twenty-four hours, when it gradually came down. I put two nurses to nurse her, and ordered whiskey and milk every fifteen minutes by the mouth, treating the case by elevation of the foot of the bed as I would a case of severe hemorrhage. She made a rapid convalescence. The wound healed by first intention, and the stitches came away from the vagina without any difficulty.

Case 3. A case of five months' pregnancy and a fibro-myoma. Removed uterus and myoma. No pedicle left. Patient left the table with a pulse of 86. Pulse once reached 112. Highest temperature 105⅕. There was some distension that was easily controlled by purgatives. The wound healed readily throughout, and the patient made an easy convalescence. When leaving for Muskoka on May 19th last, she was sitting up and able to be out of bed, looking the picture of health. She was then four weeks past the time of operation. During my absence in Muskoka, symptoms of bowel obstruction set in and she died. At the *post mortem* examination

a coil of intestine was found obstructed just under the incision. This death cannot be attributed to the operation. I never left a patient better in my life, and certainly was never more surprised than when I heard of her death.

I have now compared three cases in which pedicles were left, and three in which no pedicles were left. All of the cases survived the operation, even the last one, because I call that a successful operation. A surgeon cannot be held responsible for every complication that may arise when the patient is virtually over her operation and able to go about and out of his reach. I have brought down some of the tumors to give you a better idea of their size.

But a few days ago Case No. 3 of the first series came briskly into my office a happy, cheerful young woman of 35 years, the picture of health. Her enlarged abdomen and the high apron string that annoyed her so much have become things of the past, and she is now free from her unpleasant and inconvenient periodical excessive hemorrhages. This is but the history of one such case. If the patient survives operation the cure is complete, and the treatment of no growth or disease affecting the human being gives more satisfactory subsequent results than the complete removal of a uterus, the seat of troublesome and dangerous fibroids.

SYRINGOMYELIA. *

BY DR. D. C. MEYERS, TORONTO.

Mr. President and Gentlemen: The fact that syringomyelia has recently excited considerable discussion in other countries, and the hope that some microscopical sections of its pathology might be of interest to those engaged in the study of nervous diseases, must form my excuse for offering you a few remarks on this peculiar affection of the spinal cord. Syringomyelia, or the formation in the gray matter of one or more cavities with well-defined limits, is usually said to be due to one of two causes: (1) the persistence and further development of congenital abnormalities of the central canal, or (2) to the formation of a glioma which develops from embryonic neuroglia tissue, its central part disintegrating to form a cavity. But there is another view of the origin of this disease which, I believe, not uncommonly explains its formation, and for the suggestion of which let me take this opportunity of thanking my late Professor of Pathology, Dr. Teskey. This view is that the growth is really a cyst. There are many points in its anatomical nature which favour this opinion. The ramified prolongations seen in some of the sections recall forcibly to one's mind similar ramifications extending from the main cyst in cystic degeneration of a Graafian follicle. This mode of origin being accepted, we have a ready explanation of the constancy of the neuroglia tissue which surrounds the cyst in all parts. That this tissue can be regarded as largely of new growth is supported by the fact that there is an actual increase in the amount of tissue as well as a proportionate increase of it in the walls of the larger cavities; just as the wall of a large cyst is thicker than that of a small one. We know, too, that the tendency of cysts is to begin in normal spaces, such as the central canal or in fœtal remains of it, and in this way we can readily account for the cavity arising not only in the central canal itself, but also in other parts of the gray matter. That cavities may arise in the gray matter as the result of central myelitis is quite possible; but such cavities present no well-defined walls, nor are they lined by a layer of columnar epithelium, and do not, I think, belong to true syringomyelia. The cavity most frequently begins in the median line of the posterior commissure. In shape it varies greatly. In some cases it is irregularly oval, giving off prolongations here and there, from which processes arise, reminding one of a branched tubular gland. In all cases it is lined by a layer of columnar epithelium, such as are found lining the central canal in the normal cord. That this layer of epithelium is not complete in all cases may be accounted for by the time after death at which the *post mortem* was made, or by the fact that it may have been destroyed by mechanical causes. This layer of epithelium rests upon a basis of well-defined neuroglia tissue of somewhat varied thickness, but always conspicuous by the absence of the essential nerve elements. The size of the cavity is also subject to much variation. In some cases it extends laterally, destroying

*Read before the Ontario Medical Association.

more or less of the gray substance; while in others, much rarer cases, it extends backwards, involving the posterior columns. Descending degeneration and disseminated sclerosis are often present, as may be seen in the specimens. The symptoms of this disease are found only in the adult, and their distribution is symmetrical. The upper extremities are first attacked and suffer chiefly, owing to the greater development of the lesion in the cervical region which occurs in all cases. Sensory or motor disturbances may form the first indication of the disease. A slight wasting of the thenar and hypothenar eminences is often found early, but a change in the sensibility of the skin of the fingers perhaps more frequently attracts the attention of the patient. This sensory disturbance is peculiar in the fact that while the sensation of pain or of heat and cold is entirely lost, that of touch remains perfectly normal. This was well shown in one of Charcot's cases. The patient, a programme seller in one of the Parisian theatres, was a great cigarette smoker. He consulted Dr. Charcot on account of a burn which he unconsciously received while holding a lighted cigarette in his fingers. He was able to recognize perfectly well the position of the cigarette in his hand, but was wholly unaware that it was burning him. This disturbance of sensibility, beginning in the fingers, spreads gradually upwards, involving the entire surfaces of both arms, and sometimes also of part of the trunk. The wasting of the muscles and the motor paresis are quite similar to the corresponding changes seen in the ordinary form of progressive muscular atrophy. Scoliosis accompanies the disease in nearly all cases. A spastic rigidity of the legs is often present, being due to the secondary degeneration in the lateral columns. Atrophy of the muscles of the legs and the peculiar sensory disturbances, as seen in the upper extremities, is very rare, and only comes on late in the disease, when the affection has extended downwards to the lumbar region. Vasomotor and trophic disturbances are common. Differences in the size of the pupils are frequent, from the implication of the sympathetic in the cervical region, and the disseminated sclerosis would account for the nystagmus which is often present. The cause of the motor symptoms of this disease is not difficult to explain from the implications of the large ganglion cells of the anterior horns. When examined with a microscope, some of these cells present a granular degeneration which entirely obscures the nucleus, while others are quite atrophied in their appearance. Since each motor fibre, from its origin in a large ganglion cell of the anterior horn to its termination in the muscle, is simply a prolonged and uninterrupted process of this cell, it is easy to understand that any irritation of the cell itself must cause a degenerative change in this process; and, further, that this change must first begin in that portion farthest removed from the nucleus which nourishes it, consequently, in its most peripheral part, or where the motor fibre joins the muscle.

The sensory symptoms are much less easily explained, owing to the discrepancies which exist in the statements of the various experimenters in regard to the functions of the different tracts of the cord. That the fibres for the conduction of pain and temperature run in different tracts from those which conduct ordinary tactile impressions receives much support from clinical phenomena. According to Brown-Séquard, the central part of the gray matter serves for the conduction of the sense of temperature, its posterior and lateral parts for that of pain, while the anterior columns of the cord convey tactile sensibility, all three forms previously decussating in the median line. Schiff states that the gray matter serves for the conduction of pain, but that tactile impressions are conveyed by the posterior columns. Dr. Gowers, as the result of his long and excellent experience, says that after their decussations in the posterior commissure, the fibres subserving sensibility to pain pass upwards in the antero-lateral ascending tract, and that those subserving temperature probably pass up in their immediate vicinity. With this assertion Ferrier does not agree, for he found on dividing the outer half of the lateral column in the spinal cord of monkey that there was no impairment of painful sensibility the day following the lesion. On the other hand, Gowers quotes a case of injury to the spinal cord in the upper cervical region of a man which involved the lateral column and gray matter, as the result of which there was an entire loss of sensibility to pain on the side of the body opposite to the lesion, with-

out any loss of tactile sensibility. Since this latter observation is due to a lesion of the cord in man, and since the testing of tactile impressions in animals is often difficult, I think we are more justified in accepting Gower's view than that of Ferrier's, especially when we consider that the course of the fibres in two cords may possibly not be entirely analogous. Granting, therefore, that the antero-lateral ascending tract conveys the fibres subserving pain and temperature, the explanation of a part of the sensory phenomena of this disease is at once apparent. Since the lesion of syringomyelia is most advanced in the cervical cord, we have, in the destruction of the gray matter in this region, good reason for believing that the fibres for the conduction of pain and temperature are there interrupted, and this causes the abolition of these two forms of sensation in the upper extremities. That the legs are not so affected, or at least not until very late in the disease, would be accounted for by the very gradual descent of the lesion in the cord, and also by the fact that when the lesion is situated above the lumbar region conduction in the antero-lateral ascending tract is unaffected, and this tract would consequently conduct the sensory impressions from the legs in a perfectly normal manner. As regards tactile sensibility, experiments suggest that it is conducted by the posterior columns, and the integrity of these latter, especially in the earlier stages of the disease, would account for its retention in some cases. The same might be said of muscular sense, which is rarely affected. I might add that in the only case in which tactile sensibility was lost that Dr. Déjerine has met with, the autopsy showed a marked degeneration of the peripheral nerves.

The diagnosis of this disease, when the symptoms are well marked, is not difficult. The atrophy of the muscles, the peculiar disturbance of the sensibility, and the scoliosis form a characteristic group. From progressive muscular atrophy, in which the lesion in the muscles is like that of syringomyelia, the disturbances of sensibility form a marked contrast.

As regards Morvan's disease, much discussion has arisen as to whether it were not a form of syringomyelia, but Mr. Morvan assured me, on asking the question, that the two diseases were both pathologically and clinically distinct. In Morvan's disease sensibility of *all* kinds is lost, but only over a limited area of the hand and forearm. In this disease, too, the patient usually consults a physician on account of one or more whitlows on the fingers, and the medical attendant is sometimes surprised to find that these are lanced without causing the slightest pain, although they are often sufficiently extensive to destroy the whole phalanx.

From cervical pachymeningitis, the diagnosis is sometimes difficult, but the early and severe pains which accompany this affection, together with the fact that it attacks in a remarkable manner the distribution of the ulnar and median nerves, will usually prevent error. The course of syringomyelia is usually very chronic, and its treatment in the main symptomatic.

WHOOPING-COUGH: TREATMENT BY ONE OF THE NEWER METHODS.*

BY DR. J. T. DUNCAN, TORONTO,

Professor of Anatomy in the Woman's Medical College, Toronto.

The treatment of whooping-cough has never yet been perfectly satisfactory; has been, indeed, decidedly unsatisfactory. Many different medicines have been tried, some of them vaunted for a while, and then consigned to oblivion. And the long list of remedies is being constantly added to. Every year brings forth new specifics. Probably every practitioner present has made trial of these new remedies. The consensus of professional opinion is fairly set forth in the latest published book on the practice of medicine —I select one bearing the date 1892—that splendid work by the man who stands in the very forefront of his profession; a man whose name is a synonym for all that is best and most advanced in the treatment of disease; a man of whom all Canada is proud—I refer to Dr. Osler, of Baltimore. We may accept the utterance found in this work as embodying the opinion of the profession on this subject. On page 87 are the following words: "The medicinal treatment of whooping-cough is most unsatisfactory. Like other infectious disorders, it runs its course practically uninfluenced by drugs. . . . For the paroxysmal stage a suspiciously long list of

*Read before the Ontario Medical Association.

remedies has been recommended, twenty-two in our popular text-books on therapeutics."

But granting the truth of this remark, that up to the present time no drug has been found to influence the course of whooping-cough to any extent, this does not prevent the hope that some means may be discovered. Speaking for myself, however, I may say that having tried a number of the new remedies as they appeared, and without much success, I had grown sceptical in regard to them. Therefore when, more than a year ago, I first saw mentioned the drug of which I am to speak to-day, I did not consider it worth while to try it. But last January, first in that valuable publication, the *Medical Annual*, published by Wright, of Bristol, and afterwards in the weekly epitome of the *British Medical Journal*, the drug bromoform was highly spoken of in the treatment of pertussis.

Having then a serious case on hand, I determined to try it. I will now give the brief record of five cases in the order of their occurrence treated by bromoform.

Case 1.—This was a delicate boy, æt. 4½ years. In February of this year he began to cough, and from the 11th to the 29th he was under the treatment recommended by Quani, viz., chloral hydrate, but without much improvement. The cough was so troublesome at night, the attacks being nearly one an hour, that the boy's father sat up sometimes till 6 o'clock in the morning with him. On the 29th of February, I ordered bromoform mij to iij to be given in a teaspoonful of water three times a day. The night following the first day's administration was only marked by two paroxysms. Not only was the coughing thus reduced, but the vomiting, which had been severe, was rapidly lessened. On March 2nd, three days after getting this treatment, he was reported improved in every, and on March 4th as "much improved." From this time the improvement was rapid, and on March 8th he was stated to be "almost well." Shortly after this, however, partly because the slight remaining cough was no trouble, and partly from a strange fear of the medicine, he only received it about once a day. During the first two weeks of April he received none whatever, and the cough and vomiting returned. Bromoform was ordered again, and at my last visit, in the end of April, the cough was so slight as to be scarcely noticeable, appetite good, and he was gaining in flesh.

Case 2.—Girl, æt. 4. In this case, the paroxysmal stage began about the middle of March. They were described by the mother as "very bad." Not very numerous, perhaps 15 in 24 hours; they were yet so severe as to cause fainting on several occasions, while vomiting took place with every paroxysm. She was said to be getting constantly worse. On the 30th of March I was asked to see her, and at once ordered bromoform miij, as in Case No. 1. The mother could not obtain the drug for some days, as it was not kept in all the stores. But after obtaining it, she reported a decided improvement in three days. The cough and vomiting lessened, and the vomiting entirely ceased in ten days after taking the first dose. The appetite also improved as the cough lessened. The cough entirely ceased about April 25th.

Case 3.—Boy, æt. about 5 years. In this case, the whoop began about March 25th. It seemed a mild case. Bromoform was ordered as before. The boy was sent to Muskoka, and I can only report that his friends told me he had little trouble.

Case 4.—Girl, æt. 2 years. Paroxysms began in the first week of April, occurring about every two hours, vomiting every time. She was losing her appetite. Here the medicine seemed to check the trouble at once. She was so well by the middle of April that the medicine was stopped. At the end of April there was an occasional cough remaining, but it gave no trouble.

The last record I can present is that of a baby.

Case 5.—Girl, 7 months old. The paroxysms were present for about a week before I saw her. Cough occurred ten or twelve times a day, appetite was almost gone, she was losing flesh. Mj was ordered three times a day. This was tried for four or five days without the slightest improvement. The dose was then increased to mij. Improvement was noticed the second day after receiving the larger dose. The paroxsyms lessened in number and severity, and the appetite returned quickly to its excellent normal state. An occasional rather worrying cough still remained at the end of April.

Such has been my experience with this drug.

Allow me briefly to refer to that of others. Dr. Stepp seems to have used it in 1890, and claimed great success with it. Dr. Lowenthal next used it, and in the manner recommended by Dr. Stepp, viz., in doses of 2 to 5m three or four times a day. He says it exerts an almost specific action upon whooping-cough, at least if used early. One hundred cases were treated, æt. 8 weeks to 7 years. As a rule the good effects began to show themselves on the second or third day, the vomiting being arrested within a week after the commencement of the treatment. Complications ran a favorable course, and, where there were relapses, a return to the bromoform soon arrested the symptoms.

In the weekly epitome of *Current Medical Literature*, published as a supplement to the *British Medical Journal*, is this summary (Sept. 19th, 1891). Stepp has treated 100 cases, Lowenthal 100, Neumann 25, and Scheppers 250.

The results may be thus stated: (1) Bromoform in the doses stated is a perfectly harmless remedy. (2) The attacks diminish in number and severity. (3) The first paroxysmal vomiting disappears in two or three days. (4) Nasal and other forms of hemorrhage soon disappears. (5) It acts beneficially in complications, largely by giving affected organs, *eg.*, lungs, a chance to rest. (6) It undoubtedly shortens the duration of the attack (Stepp, 2 to 4 weeks; Scheppers, 8.)

Bromoform is a heavy sweetish liquid. It is best given dropped in a teaspoonful of water. Given thus, children like it; but be sure the drops are swallowed, as they sink through the water on to the spoon. It must be dispensed in small amounts, and kept from the light, as it is apt to change.

A PERMANENT FEHLING'S SOLUTION.—Fehling's solution by the usual formula is quite unstable. The following modification is suggested by Rossel in *Schweiz Wochenschr.:* 34.56 grains pure cupric sulphate are dissolved in some distilled water: 150.0 grammes glycerin and 130.0 grammes caustic potassa, and then made up to one litre. One c.cm. of this solution corresponds to 5 mg. of glucose. The solution is said to be a permanent one.—*Med. and Surg. Reporter.*

Selections.

CONDITIONS INDICATING CHANGE OF AIR AND BATHS IN THE SUMMER DIARRHŒA OF CHILDREN.*

BY SIMON BARUCH, M.D., NEW YORK.

The removal of the causes of disease being the chief aim of modern therapy, the unsanitary conditions that actively contribute to the development and maintenance of the summer diarrhœa of children constitute an important element in the prophylaxis.

Change of air does not, as is sometimes erroneously supposed, improve the condition of the sick child by reason of any special difference in the proportions of oxygen or other chemic constituent. The chief factors that warrant us in advising change of air are (1) high temperature and marked humidity, or both; (2) the presence of impurities.

The pronounced influence of high atmospheric temperature and extreme humidity in the causation and maintenance of summer diarrhœa in children has long been observed. Whenever, therefore, the usual treatment seems unavailing, especially when extreme prostration, with or without febrile exacerbations, becomes an element in a case of summer diarrhœa, the question of change of air becomes important. Of what avail are stimulants, tonics, and food when the little sufferer is forced to toss under the constant, relentless systemic oppression produced by a stifling atmosphere, especially if aggravated by an excess of moisture, from which there is no escape, even by the most careful ventilation? Rich and poor are alike crushed under this terrible combination; for even in the open parks of the city it operates in full force. Removal by a rapid and comfortable journey to high altitudes or seaside, sufficiently remote to furnish a complete change from one or both of these prejudicial atmospheric conditions, becomes imperative in many cases. The change in the entire aspect of a case of summer diarrhœa under such favoring conditions has been so often observed that I need not emphasize its importance.

* Read before the Pediatric Section of the New York Academy of Medicine, May 12, 1892.

The existence of atmospheric impurities demands removal of the little patient. Among the well-to-do classes atmospheric impurities are rarely operative in summer. Change of air will rarely be required in this class of patients. How different is it among the poor! The noisome tenements in which the children of the poor, and many even of the better class of working people, are huddled together are excellent places for the culture and propagation of the elements that contribute to the development and maintenance of summer diarrhœa in children. The chief aim in the treatment of the latter is now recognized to be clean food taken into a clean stomach, and its detritus removed as far as possible through a clean intestinal tract. The difficulty of meeting these indications in apartments abounding in dust and emanations from numerous human beings crowded together need but be referred to. Hence, removal from the influence of this prominent etiological factor becomes imperative, not for the purpose of securing, as was formerly held, air containing more oxygen, but with a view of having the patient surrounded by air containing less filth and its accompanying bacteria. While a change is imperative in almost all cases of summer diarrhœa of the children residing in crowded tenement houses, it is not so important in those cases whose environment is more favorable for home treatment. Indeed, the change from a comfortable home to a country hotel, which is apt to be overcrowded, is not to be advised without careful reflection. It is not an infrequent occurrence to order a sick child away when the symptoms become alarming without time for preparation or due inquiry. The consequences are discomfort from immaturity of plans, great expense, disturbance of the family, and consequent anxiety and unhappiness for the parents and friends.

Do the benefits to accrue to the little patients warrant these? The advantages and disadvantages of removal should be well weighed ere a change of air is decided upon; but, above all things, we must be satisfied that we have exhausted all other treatment. As I have said already, careful attention to sterilization of the food and to intestinal irrigation are of far greater importance than change of air. *We should be sure that these have been fairly tried before advising the change.* This statement is made as the result of practical observations at a noted summer resort, where I see many such cases every summer. To illustrate: In the summer of 1890 I was asked by Dr. Alfred Meyer, who was ill, to see for him a wizen-faced infant whose mother, being poor, had, at great sacrifice, brought it to a third-rate hotel at Long Branch for change of air as a last resort. The child had not improved simply because its food was not proper and its intestinal canal had not been flushed. One dose of castor oil, followed by two intestinal irrigations, and the use of sterilized milk, obtained by converting her medicine bottles and saucepan into a sterilizer, brought about a rapid recovery, enhanced by the constant exposure of the infant to the pure, ozone-laden air. Last summer I was called to the Long Branch home of the Babies' Shelter of New York to see two children whose diarrhœa had not improved under the best dietetic and medicinal care in the city and after several weeks' residence in the country. A few intestinal irrigations sufficed to make a complete change in these cases, and contributed more to their recovery than change of air had done. The lesson from such cases is evident. While all cases of summer diarrhœa of infants living in crowded houses demand change of air, other treatment is at least equally important. Among the better-situated change of air need not be insisted upon until all approved methods of treatment have been fairly tried.

Conditions indicating Baths.—Baths for cleanliness are always demanded in summer diarrhœa, not only because the frequent soiling renders them more necessary, but because the maintenance of the functions of the skin seems to relieve internal congestion and fluxion.

In acute cholera infantum baths for therapeutic purposes are of paramount importance, affording more positive relief and contributing more to the cure than all other measures. This form of summer diarrhœa has by some not inaptly been regarded as a type of heat-stroke. Certain it is that if the temperature is taken in the rectum it will almost always be found high; not infrequently there is hyperpyrexia, though the skin of the extremities and face be cool and clammy. Whenever the temperature exceeds 102° F., a cooling procedure is indicated. It is

important that the proper method of bathing should be adopted, and that its *rationale* be well understood.

In these cases there is usually profound involvement of the nervous system, frequently manifested by a dull, apathetic countenance, sunken eyes, deadly pallor, cool extremities, not rarely terminating in outspoken eclamptic seizures. Medicines and stimulants are useless, because the stomach and rectum do not tolerate them. Such a child should be put at full length into a tub of water at 90°, after its face and head have been bathed with ice-water; gentle friction should be constantly made while some one is removing with a pitcher the tepid water and replacing it by ice-water poured over the side of the tub farthest from the patient's body. The temperature of the bath is thus gradually lowered to 80°. If there be marked cerebral disturbance, water at 60° may be poured upon the head and shoulders. The child's body must be entirely submerged, the head only not being immersed. Its cries and protestations of chilliness must be met with gentleness, yet with firmness. For fifteen minutes the agitation of the water and friction of the body should be kept up, unless cyanosis of the face or decided shivering ensues. The latter will be prevented by active friction, which stimulates the peripheral circulation.

After the bath the child is placed upon a linen sheet, previously laid smoothly upon a blanket. If the temperature before the bath—and it should always be taken at this time—has been 103.5° or higher, the child should be wrapped in the sheet so that every part of the body and extremities is well covered by it; the blanket is now snugly wrapped over and tucked under the body, which is thus allowed to dry. If, on the contrary, the temperature has been below 103.5°, the child should be gently mopped dry and its clothing be replaced at once. Such a bath is almost invariably followed by calm and refreshing slumber, from which the child awakens bright and playful.

Let it be understood that the object of this bath is not to reduce temperature, although this is an important incidental result. We have here a vaso-motor paralysis, as evidenced by the pallor of the entire body, even when a high temperature is registered in the rectum. By immersing the entire body in tepid water we produce a mild shock, which is gradually increased by the removal of warm and the addition of cold water, and is enhanced by frictions of the body and constant agitation of the cooling water against the skin. These gentle shocks are succeeded by equally gentle reactions, so that the cutaneous vessels dilate, as evidenced by redness of the skin. If, in addition, the face and head are bathed with a little colder water, at 60°, the shock and reaction are increased, the respiration deepens, the heart beats with more vigor and less rapidity, the eye brightens, the color returns to the lips, the child becomes more animated.

The effect of a skilfully-administered bath in the condition of nerve prostration incident, in many children, to acute summer diarrhœa must be observed to be fully appreciated. In my experience it has been an inestimable boon, affording hope and comfort under the most trying and desperate conditions. My mind still retains vivid recollections of the days when I was a student and of the early years of my practice, when the condition of profound adynamia, usually associated with hyperpyrexia, was called spurious hydrocephalus, and the cases were allowed to die under blisters to the nucha and small doses of calomel. These cases do not now come under my observation; they are forestalled by the bath and by more rational treatment, foremost in which is judicious gastro-intestinal irrigation.

When there is objection or prejudice to tub-bathing, or when there is extreme jactitation, or when there are convulsions, the little patient may be placed in the wet pack, or the bath may be followed by the latter to maintain the calming effect. The wet pack is prepared by wringing out of water at a temperature of from 50° to 60° a linen sheet folded into a third of its usual size and smoothly laid (folded to suit the size of the child) upon a blanket. The child is snugly wrapped in the damp sheet (which may be made more wet if the temperature be high), so that the arms receive a fold to separate them from the body, and the legs a fold to separate them from each other. The blanket is now snugly tucked around the child, so as to completely envelop it, like a mummy, to prevent evaporation. This pack may be repeated two or three times, at intervals of ten minutes. The previ-

ously tossing child will usually drop into tranquil slumber, from which it should not be aroused. After the wet pack the body should always be rubbed with a linen cloth not quite wrung out of water at 70° F., and dried.

In the subacute form of summer diarrhœa, the chief condition indicating baths is the general depression of the system arising from the great drain upon the blood and nervous system. The pulse is usually rapid; the temperature ranges from 99° to 101°, with occasional exacerbations; the skin is inelastic; the face is sallow; in short, the symptoms are those of chronic adynamia, due to imperfect nutrition. To stimulate the appetite, improve the general nervous condition—in a word, to refresh the entire organism—should be our therapeutic endeavor. The most approved tonics and stimulants often fail. In these cases general ablutions, morning and evening, are preferable to baths. The child is placed upon a soft woollen blanket; the abdomen, chest, and back are rapidly bathed, not sponged, as follows: From the hollow of the naked hand water at a temperature of 75° F. is poured upon the skin, which is then gently rubbed with the same hand. This is repeated until the entire body has been thus treated as far as the knees and elbows. The body is now rapidly dried by placing it upon a linen sheet, using friction with a rough towel if the temperature is below 99 5°, and only gentle mopping if it is above 100° F. If the temperature reaches 102°, a general bath is indicated, beginning with water at a temperature of 95°, which is gradually reduced by agitation and friction to 85°. Gentle drying follows.

The refreshing effect of these procedures has been so frequently observed that I do not hesitate to commend them to your adoption. There are many modifications of baths indicated by the various symptoms in summer diarrhœa of infants. Suffice it to say that no case should be regarded as intractable or too desperate until some form of hydriatric procedure (the adaptation of which to each case often requires more judgment than that of medicinal agents) has been tried.—*Medical News.*

A CASE OF STRICTURE OF THE PYLORUS RESULTING FROM GALL STONE.—A.B., æt. 58; Irish; stoker; during January complained of dull pain in the right side in the mammary and hypochondriac regions, the pains occasionally extending to the right shoulder. Obstinate constipation and persistent vomiting, with these pains, constituted the symptoms for several weeks preceding. No family history obtainable. He gave a history of gonorrhœa and the primary and secondary signs of syphilis in his younger years. From the gonorrhœa resulted an urethral stricture which had occasionally caused partial or complete retention of urine. During the past few years he had a number of attacks of pain of considerable severity in the right side, which, however, did not confine him to bed. In March, 1891, he had a severe illness, when the chief source of complaint was an acute pain in the left chest, extending downward to the epigastrium. Toward the end of 1891 he began to fail; the pains in the right side became more continuous and troublesome; anorexia was marked; bowels constipated. Vomiting now set in. When he came under observation in January, 1892, his general condition was very poor; he was greatly emaciated, and had a decided cachectic appearance. Vomiting was constant, and he was unable to retain food or medicine. Vomitus was thin mucus, tinged green with bile, and of a very offensive, sourish odor. No bloody or "coffee grounds" vomit ever noticed. Bowels were constipated and difficult to move by medicines or enemata. The stools were normal in color. Physical examination: Lungs normal; abdomen greatly retracted; upper line of liver-dulness a little high; the lower margin of liver could be felt an inch below the chondral cartilages. The gall bladder could not be made out. Percussion gave stomach resonance high up, and over a wide area. Palpation of stomach gave negative results. Scars over tibiæ that were plainly syphilitic. Urine, normal color; turbid; strongly acid; sp. gr. 1014; trace of albumen. Sediment showed pus corpuscles and kidney and bladder epithelium, but no casts were found. Rectal feeding and medication proved futile, and on February 25th the man died, apparently of inanition. Diagnosis at that time: Stricture of the pylorus, due probably to carcinoma or syphilitic gumma. *Post mortem*, twenty-four hours after death: Body greatly emaciated. Lungs, pleural adhesions extensive over right lung; about a pint of fluid in the left chest.

Kidneys small, capsule adherent, cortical portion very narrow. Liver about normal in size; surface covered with the cicatrices of an old perihepatitis. Stomach considerably dilated; the pyloric end lying adjacent to the gall bladder. The mucous membrane was rather pale and covered with a yellowish, tenacious, offensive smelling mucus, but not markedly diseased in any part. On attempting to pass the finger through the pyloric opening it was found that the outlet was nearly closed by some constricting bands about its external or peritoneal surface. Using considerable force, thereby tearing their constricting fibres, the index finger could be forced through into the duodenum. A hard lump in the midst of a mass of adherent viscera at the site of the gall bladder proved to be viscus contracted to about the size of a large pigeon egg, and inclosing tightly a calculus of the size just mentioned. This calculus, when dried, had a dark-brown exterior, rather brittle, and when cut traversely showed a nucleus the size of a hazel nut, dark colored and structureless; around this core are shown arranged in concentric circles layers of bright yellow inspissated bile, each separated from the succeeding layers by a whitish or a dark narrow zone. The gall bladder walls were thickened, and it had lost all resemblance to its normal appearance by being enclosed in a mass of tough fibrous connective tissue, which bound together all the parts in relation to that viscus. The lower surface of the right lobe of the liver, on either side of the cystic fissure, the hepatic flexure of the colon, the anterior wall of the abdomen, and the pyloric end of the stomach were attached to, enclosed, and tightly drawn by these connective tissue bands. The presence of the gall stone had evidently set up a chronic inflammatory process about the gall bladder, plastic lymph was thrown out, which in course of time contracted, and the pyloric end of the stomach happening to be involved in this cicatrical contraction, stricture of its lumen resulted necessarily. No carcinomatous processes nor syphilitic gummata were discovered anywhere.—*J. C. Falk, M.D., Ph.G., in the Medical Fortnightly.*

REMARKS ON THE EVACUATION OF DÉBRIS AFTER LITHOTRITY. — Surgeon-Major Forbes Keith having described in *The Lancet* of June 11th, 1892, a method of removing stone fragments after lithotrity other than by the process of evacuation with the aspirators at present in vogue, I will describe a procedure I have seen during the last twelve months at M. Guyon's clinic at the Necker Hospital and elsewhere in his practice, which seems to possess certain advantages. I have adopted it myself to some extent and I know that other surgeons think favorably of it. There can be no doubt that the shortcomings of lithotrity are chiefly connected with the difficulty existing of guaranteeing that every fragment, however small, is removed and that nothing is left behind on the completion of a crushing operation which is capable of furnishing a starting point for another concretion. Of all the conditions favorable to the reproduction of stone this is probably the most fertile one, and all proposals tending to diminish the liability in this direction are deserving of careful consideration. M. Guyon's practice, as I have now observed it on several occasions in public and private work, is as follows: The patient being fully anæsthetized, the fenestrated lithotrite is introduced, and the stone is not merely broken up but absolutely pulverized. In the last case I saw, a urate-phosphate stone with a diameter which only just brought it within the grasp of the largest lithotrite, was subjected to a process of trituration which lasted for twenty-five minutes by my watch, without, I believe—as far as I can remember—a single withdrawal of the instrument. When no fragments could be felt with the lithotrite the evacuating catheter was introduced. The latter consisted of a full-sized instrument with a large eye on either side of the beak. No aspirator was attached to it such as we are in the habit of using for withdrawing fragments by suction-pressure, but after the bladder had been allowed to empty itself spontaneously of its contents by the catheter an ordinary syringe was attached to the latter and about six ounces of warm boracic lotion were gently injected. Then the syringe was disconnected and the bladder allowed to empty itself, this process being continued until the contents of the syringe were returned absolutely pure. The bladder was finally washed out with a solution of nitrate of silver (1 per 1000) and a rubber drainage catheter was passed and retained for twenty-four hours. The opera-

tion was completed in forty minutes and considerably over an ounce of stone powder was withdrawn suspended in boracic lotion. The total amount of blood was little more than sufficient to color the water and entirely disappeared before the syringing was completed. I examined the débris after it had all been collected. In its moist state it had the appearance and feel of soft homogeneous mud. There were no appreciable fragments of stone in it. The following were the points noticeable in this and similar procedures, as elsewhere observed: (1) The use of the lithotrite to produce this effect was necessarily more prolonged than where mere fragmentation is the object. This, with the patient under an anæsthetic, is a matter of no importance so long as the lithotrite is carefully used. (2) The less frequent introduction of lithotrites and evacuating catheters along the urethra. This is a point of some little importance where the prostate is large and the deep urethra irregular. (3) The back action of the suction apparatus, by means of which fragments of stone often become impacted in the saccules and lacunæ which are found in bladders complicated with enlarged and irregular prostates, is done away with. The force of a syringe is probably less than that of the back action of a strong rubber bag compressed by the hand. Further, impalpable wet powder is substituted for irregular fragments of stone. The latter by their nature are not only more liable to become impacted in depressions within the bladder wall, but, by their movements under the force of the aspirator, to wound the mucous membrane, as illustrated particularly by Surgeon-Major Keith in the paper referred to. (4) With the syringe there is no chance of fragments once withdrawn being washed back by any return current into the bladder. No aspirator that I have yet seen is free from this objection. I am not aware that there are at present any statistics indicating the relative frequency of recurrence after these two methods. That the subject is worthy of careful consideration is evident from the large number of recurrences which follow lithotrity, more particularly in those cases which are further complicated with conditions rendering the patient completely dependent on the use of the catheter. —*Reginald Harrison, F.R.C.S. Eng., in The Lancet.*

ASEPSIS AND ANTISEPSIS IN MIDWIFERY.—A most suggestive monograph from the Dresden Frauenklinik, "On the prevention of Puerperal Fever," embodying the methods and results in that institution during the last six years, and coming at the psychological moment when the scope of antiseptics in obstetrics is being determined by the experience of workers over all the world.

Clinical and bacteriological studies are daily amplifying the knowledge of possible sources of infection, and suggesting new procedures calculated to yet more rigidly exclude the danger of sepsis. The paper before us compares the results of careful abdominal palpation anterior to labor, an absence of vaginal examination during parturition, and an entire abstention from vaginal douching during the puerperium, with ordinary internal examination for diagnosis, and vaginal irrigation in the usual manner in the days succeeding delivery.

Tabulated statistics for the three years ending in 1888, and during which vaginal washing was a routine procedure, are arrayed side by side with the percentage results of the three years ending in 1891, no douching being practised during the latter period. As the average number of deliveries was 1350 per annum, the data seems fairly comprehensive, and the former triennium shows about 80 per cent. of apyretic puerperia, as against the marked advance to 90 per cent. during the latter time. Immediately the vaginal irrigations were excluded, the normal puerperia increased by 10 per cent.

Combined with the cessation of the use of sublimate douches was the almost entire substitution of abdominal palpation for vaginal examination. To those who know the care and detail with which this method is carried out on the Continent, its usefulness will not be strange. The authors urge that every opportunity should be seized for its development, and that, in the majority of cases, no supplementary internal investigation is required. They attribute high importance in the prevention of puerperal fever to this substituted procedure, and state, in set terms, that those puerpera internally examined by even an aseptic finger have a notably less favorable convalescence than those examined by abdominal palpation only.

The scheme recommended by the authors as

the net product of their extensive experience, consists of internal examination as little as possible, and external examination as much as possible, the most careful personal antisepsis, scrupulous cleansing of the external genitalia during the whole puerperium, and especially careful cleansing and disinfection of the vulva and its surroundings before every internal examination.

The paper abounds in statistics and technical data, and the time-period embraced in the communication has been thoroughly analyzed for facts and indications.—*Med. Chron.*

A MODEL TO IMITATE.—There are a great many peculiarities reported of men of genuis. Sir Isaac Newton was a vegetarian; General "Stonewall" Jackson thought one side of his body was heavier than the other, and always carried a weight in his pocket; Schopenhauer played the guitar; Erasmus would not eat fish; and Dr. Johnson never took a walk without touching the lamp-posts. But we learn that the peculiarity of Mr. Gladstone's greatness is more curious and subtle than that of any of his predecessors. Every bolus of food which he takes is chewed thirty-two times! Why thirty-two instead of thirty-nine, which is the number of the Articles, or thirty, which is the number of the days of the month, or some other number which has a specific significance, has not been explained. Perhaps some time the Grand Old Man will leave his Homeric and Celtic studies for an elucidation of these more serious problems. We are, however, not disposed to quarrel with thirty-two. It is a good number, and one which ought to secure thoroughly pultaceous mastication, and a completely saturated insalivation, besides exercising the masseters, temporals, external and internal pterygoids, and securing time for a pleasing gratification of the sense of taste. There are a great many things making up the admirable character of Mr. Gladstone which cannot be imitated, however desirable that might be. But his two-and-thirty method of mastication can be followed, and would have important influences upon the health and happiness of Americans if it were done. Dyspepsia, biliousness, headaches, neurasthenia, insanity, and bad temper would decrease, and perhaps disappear. We commend the methods of operation upon the food bolus adopted by Mr. Gladstone. If humanity imitates it we can truly say: *Exegi monumentum ære perennius*, no matter what becomes of the Irish.—*Med. Rec.*

THE SOURCE OF HALF THE WORLD'S UNHAPPINESS.—"The longer I live," said Sydney Smith (in good health), "the more I am convinced that half the unhappiness of the world proceeds from little stoppages, from a duct choked up, from a vexed duodenum or an agitated pylorus. My friend sups late; he eats some strong soup, then a lobster, then some tart, and he dilutes these esculent varieties with wine. The next day I call upon him. He is going to sell his house in London and retire into the country. He is alarmed for his eldest daughter's health; his expenses are hourly increasing, and nothing but a timely retreat can save him from ruin. All this is the lobster; and when over-excited nature has had time to manage this incumbrance, the daughter recovers, the finances are in good order, and every rural idea is effectually excluded from his mind. In the same manner old friendships are destroyed by toasted cheese, and hard-salted meat has led to suicide. Unpleasant feelings of the body produce corresponding sensations in the mind, and a great scene of wretchedness is sketched out by a morsel of indigestible and misguided food."—*Annals of Hygiene.*

THE American Medical Association, at its recent meeting in Detroit, adopted a resolution, introduced by Dr. Charles A. L. Reed, of Cincinnati, looking to the annexation of Canada, at least the medical portion thereof, to the United States. In other words, should this amendment to the by-laws prevail, the Dominion of Canada will be embraced in the jurisdiction of the American Medical Association, and we may soon expect to see the Canadian profession walking arm-in-arm with our own down the aisles at the meetings. At the Detroit meeting many distinguished physicians from Canada attended by invitation and took part in the work of the sections. It looks as though they would soon take their places as members, with all the rights and privileges pertaining to those in the United States, to which they will assuredly be very welcome.—*Buffalo Med. and Surg. Jour.*

THE LEGAL LIABILITY OF HOSPITALS.—On the 16th May the Court of Common Pleas of New York added another decision to the interesting question of the legal liability of hospitals. The question, in brief, is: Is a hospital corporation legally responsible for injury to a patient? In one case the suit was brought against the Manhattan Eye and Ear Hospital. The plaintiff's eye was operated upon at this institution, and he showed that the after-treatment was not of a proper character. As a result there was entire loss of sight from the eye. The first trial resulted in favor of the plaintiff; but the General Term of the Supreme Court reversed this decision, holding that no cause of action had been made out. The position of the court was this: Inasmuch as the corporation had exercised all proper care in the selection and appointment of the physicians of the institution, it, being a public charity, was not liable. To recover against the hospital it must be proved that there was an omission to exercise due care in the selection of the persons in its employment. In the case just decided the plaintiff's son was treated for an injury to his thigh, and owing to the alleged negligence of the surgeons of the institution, the Society of the New York Hospital, there was not a good recovery. The hospital authorities simply showed that they were a public charity, and that they had used all possible care to select competent physicians and surgeons. Upon this showing alone the court dismissed the complaint.—*New Orleans Med. and Surg. Journal.*

RECOVERY AFTER TAKING A LARGE QUANTITY OF VERATRUM VIRIDE.—Mr. A. was attacked on February 5th with severe epididymitis and orchitis. That night his brother came to me, saying that his fever was very high and that he was suffering a great deal of pain. I prescribed for him "tr. verat. virid. (Norwood's), f℥iv. Sig.: Two drops every half hour until perspiration is well established." The patient read the directions *two teaspoonfuls* every half hour, and took the first dose accordingly at 8.30 p.m. This he retained without any appreciable effect until 9.05 p.m., when he took the second dose of two teaspoonfuls. In about half an hour he "began to vomit, and became very weak," as he described himself. On the following morning I was called to see him, and having heard his story of how he took the medicine, was more surprised to find him alive than that he was exceedingly weak and very pale. The heart was feeble but regular, and the respiration very nearly normal. A small quantity of whisky and infusion of digitalis were given, and the patient recovered without any unusual symptoms. The prescription was compounded by a reputable pharmacist, who assured me that he had dispensed the stronger tincture. The interest in the case centres in the remarkable fact of the patient's having retained so large a quantity of the drug for nearly an hour without any disastrous effects.—*James P. Tuttle, M.D., in New York Med. Journal.*

ON THE DANGERS OF WASHING OUT THE STOMACH.—In the current number of the London *Practitioner* there is a valuable and timely article by Dr. Soltan Fenwick, of London, on the dangers of washing out the stomach. After pointing out the usefulness of this therapeutic measure in suitable cases he deals with the dangers attending it, and the harmfulness arising from its employment in unsuitable cases. Twenty-five cases of convulsive seizures in chronic diseases of the stomach are collected, and in six of these the attacks were apparently brought on by the use of the stomach tube. Both general convulsive seizures and tetany may be brought about by any irritation other than by mechanical means of the gastro-intestinal canal, but in some cases reported by Dr. Fenwick it is impossible to eliminate the stomach tube as being the active factor. Tetany arising from gastric disturbance is very fatal, upwards of 60 per cent. proving fatal. A case of perforation of a gastric ulcer occurring immediately after the use of the stomach tube is reported. Hemorrhage from the use of the stomach pump is not uncommon in cases where there is at the time ulceration of the mucous membrane, as in carcinoma and chronic ulcer. *Montreal Medical Journal.*

TRICHINOSIS OF THE TONGUE.—A curious and interesting case, albeit somewhat difficult to understand, is recorded by Dr. Oitiz of Toire. The patient was a man, æt. 50, a robust countryman, with no history of syphilis nor of tuberculosis, who came for advice with an ulcerated growth of his tongue. The disease had been in

progress about a year, and presented the characters of an epithelioma. Some misgivings, however, were expressed about the precise diagnosis, inasmuch as the ulceration was not of that foul nature such as usually occurs in connection with malignant disease. No improvement having followed the treatment adopted after a trial of a fortnight, it was decided to amputate the tongue. This was successfully performed, and on examination of the organ subsequently, the disease was found to be trichinosis, ulceration of the thickened tissue around the cysts having taken place.—*Medical Press.*

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DRAINAGE IN SALPINGITIS AND PERITONITIS.

No subject, in recent years, has attracted more attention than the treatment of the diseases of the uterine appendages. Our knowledge of the condition of things in periuterine inflammations is much more exact than it was a few years ago. It is now generally admitted that pelvic cellulitis, as formerly understood, is comparatively rare. Some go so far as to deny its existence, except in a very small proportion of cases in which it occurs after parturition. Without discussing any debatable points connected with this subject, we have to recognize the fact that, in a large number of women invalided through pelvic inflammations, the Fallopian tubes have been converted into abscesses. Lawson Tait, and a number of his coworkers in abdominal surgery, tell us that nothing short of the complete removal of the uterine appendages, under such circumstances, will effect a cure. We never had any sympathy with the craze which impelled many to remove all sorts and conditions of tubes and ovaries for simple pelvic pains and backaches; but we believe the removal of pus tubes is perfectly justifiable, and, in a large proportion of cases, the only procedure that is likely to effect any permanent good.

This operation, however, involves so sad a mutilation that many are quite unable to grow enthusiastic over it. Among the most conservative of modern gynecologists is Dr. W. M. Polk, of New York, who has uttered many words of wisdom on this subject during the last few years. In an article published in the *New York Journal of Gynecology and Obstetrics*, May, 1892, he refers to his method of treating such cases by means of drainage, with gauze packing. He admits that nothing but the removal of the appendages will relieve the symptoms in many cases. He considers that our knowledge is not as yet sufficient to enable us to decide in any particular case that the radical operation is necessary, and makes it a rule always to try certain less radical methods first.

His routine treatment includes rest, saline purgatives, hot water douches, and glycerinized tampons for a certain time, the length of which will largely depend on the amount of periuterine tenderness. After the completion of this *old-fashioned* line of treatment, he proceeds to pack the uterus with gauze. This he considers an *operation* involving certain risks if not carefully performed with the strictest antiseptic precautions. His directions epitomized are as follows: Cleanse the vulva, the vagina, and the cervical canal as for hysterectomy; dilate the cervix; introduce a cervical speculum having an inside diameter of five-sixteenths of an inch; irrigate interior of uterus; use sharp curette over the whole of the interior of uterus; irrigate again; pass a strip of iodoform gauze, which has been previously soaked in a bichloride solution and then rinsed in hot water, into the uterus with a Sims tampon screw, filling the cavity completely; bring the end of the strip out into the vagina and coil it up against the cervix; place a second piece of gauze loosely in the vagina. An anæsthetic is necessary in the majority of cases (in not less than 75 per cent.). The full details will be found in the February

number of the *New York Journal of Gynecology and Obstetrics*. He carries out this line of treatment in cases of chronic endometritis, chronic metritis (subinvolution), and chronic metritis with associated salpingitis. He chooses as the best time for his treatment the period immediately antecedent to menstruation.

Dr. Polk's contention is that his methods will frequently cure periuterine inflammations, including pyosalpinx. He acknowledges that in a certain proportion of cases they are not successful, but he insists that they always cause a diminution of the periuterine masses produced by uterine inflammatory exudations. He thinks his results show that such a course of treatment as he advises improves the condition of things in the pelvis, and gives a better chance for laparotomy when it becomes necessary. His efforts are certainly in the right direction, and his views on the subject are worthy of very careful consideration.

ANÆSTHESIA BY CHLOROFORM.

In some of the journals a spattering fire of assaults and rejoinders is still being kept up pro and con on the question of chloroform versus ether for anæsthetic purposes. The time that has elapsed since the report of the Hyderabad commission would seem to have been long enough to have settled the opinions of every authority, but the champions of each side are still trying to convict, if not to convert, the other. The point at issue seems to be whether or not death by chloroform is due to respiratory or to cardiac failure, the corollary being, of course, whether or not the anæsthetist, when using chloroform, should devote his whole attention to the breathing and let the pulse alone. As a matter of ordinary practice and of ordinary sense, no anæsthetist while giving chloroform, we suppose, ever does confine his watch to one danger signal. There are at least four points which should be, in every case, carefully attended to, in addition to the careful support of the lower jaw, either by the point or by the two angles, preferably, perhaps, the latter, thus supporting the hyoid bone with its attached muscles, and the base of the tongue, and leaving the entrance to the larynx free. These four points may be stated as follows: (*a*) During the onset of the second stage the heart should be carefully watched, as the manner of its settling down after the preliminary excitement gives often a valuable hint as to what is to follow. If from being rapid and bounding the pulse slows too quickly and becomes irregular, danger is ahead, probably for the respiratory centre as well. It may be taken as established that while death does sometimes occur from cardiac failure, its most frequent cause altogether is respiratory failure. (*b*) The respiration should be watched, especially as the stage of profound anæsthesia is approached. Inequality of rhythm and variations in depth may indicate impending failure or only an attack of vomiting. If two or three successive respirations are seen to be each shallower than the last, the anæsthetic should be continued very cautiously, as failure may occur even if the mask be at once removed. It seems that vomiting is heralded more commonly by a respiration which shows increasing rapidity, and preponderance of inspiration over expiration, at any rate as regards effort and sound, if not also as regards amount of air. It is almost unnecessary to remind the reader that mere abdominal movement is no proof of respiration, as the diaphragm may still be acting and no air entering the glottis. (*c*) The pupil is a signal that probably no one ever neglects to watch carefully. (*d*) Lastly, the color. It takes very little experience to teach one to watch the condition of the capillary circulation as a sign of the true state of affairs, or to recognize the impending catastrophe in the ashy deathlike paleness of lips and face, with, perhaps, a slight toxic sweating or clamminess. If even a vestige of color remain in one cheek, returning easily after slight pinching, alarm is unnecessary, other signs being taken into account at the same time, for of course no one dare pin his faith to a single signal, but must have all the time under the most careful scrutiny the *tout ensemble* presented by a patient who, at the very best, is hovering on the confines of the nether world.

THE late Dr. D. Hayes Agnew, of Philadelphia, left an estate valued at $250,000. He bequeathed to the University of Pennsylvania $50,000, his work on surgery, library, and anatomical collections.

Meeting of Medical Societies.

CLINICAL SOCIETY OF MARYLAND.

W. T. WATSON, *Secretary.*

Baltimore, May 20th, 1892.

The 267th regular meeting was called to order by the president, Robert W. Johnson.

Dr. H. O. Reik, 1525 N. Carolina St., Baltimore, was elected to membership.

Dr. Samuel Theobald related

A CASE IN WHICH THE ELECTRO-MAGNET WAS EMPLOYED SUCCESSFULLY FOR THE REMOVAL OF A FRAGMENT OF STEEL FROM THE VITREOUS CHAMBER OF THE EYE.

A lad of 12 years of age, while using a hammer, struck a small piece of steel, which penetrated the eye and lodged in the vitreous chamber. The case was first seen in six days after the accident. The fragment penetrated the upper margin of the cornea, and just in line with this was a hole through the iris as large as a pin's head. The eye was markedly injected with evidences of perhaps commencing iritis. In vitreous humor, diffused opacity and numerous floating opacities. There was a punctate opacity on the anterior surface of the lens where it had been touched by the foreign body. Details of fundus could not be seen. The foreign body was not visible. Vision, 16-125ths. Operation 5 days after the patient was first seen, or 11 days after the accident. The injection increased and iritis had begun. Incision about 4 m.m. in length through the sclerotic, between the external and inferior rectus muscles. A Hirshberg's electro-magnet was employed. A single cell of the battery was used; this enabled the magnet to lift up a tack hammer. The point of the magnet was introduced well into the vitreous humor three or four times without success, but finally it brought out the little particle of steel the size of a pin's head. The conjunctival wound was stitched, and an opium and boracic acid lotion with compress was used. Atropia kept the pupil dilated. Boy suffered very little. Seventeen days after the operation he left the hospital, at which time the injection was very much less, the vitreous had cleared up very materially, and vision was 16-45ths. At the present time, 44 days after operation, the fundus of the eye can be seen with perfect ease. There are one or two floating opacities in the vitreous humor. Vision, 16-30ths.

Dr. Robert Randolph: This case is one of a very large class, forming the larger number of cases which come to us for enucleation and the larger number which end in sympathetic ophthalmia. We have here a better method of dealing with such cases. When we have a reasonable idea of the location of the foreign body and under strict antiseptic precautions the operation is indicated, and there are a sufficient number of cases on record to justify us in looking for a happy issue.

Dr. Kate Campbell Hurd read a paper on

TREATMENT OF SPINAL CURVATURE BY THE ZANDER METHOD.

Dr. J. H. Branham reported a case in which

A SEA-TANGLE TENT WAS FORCED INTO DOUGLAS' CUL DE SAC IN AN ATTEMPT TO PRODUCE ABORTION.

On Feb. 27th, 6 p.m., saw in consultation a young married woman of 24, mother of three children. She had been about two months pregnant, and had attempted to produce an abortion on herself with a sea-tangle tent three days before I saw her. After leaving it for twenty-four hours she tried to remove it, but simply pulled out the string. Next morning her physician was summoned, but failed to find the tent, although the uterus was partly dilated and from it issued a badly-smelling discharge. When I saw her, her temperature was 103°, pulse 120, abdomen very much swollen and very tender. The finger could be introduced into the uterine cavity, but no tent was found. An opening in the wall of the cervix was discovered, and through this the tent was felt in Douglas' *cul de sac.* It was removed through this opening, and was found to be about the size of one's little finger. An opening was made into the *cul de sac* and a drainage tube put in. The uterus and vagina were washed out with 1-4000 bichloride. There was a temporary improvement, but she finally died 36 hours after I first saw her.

The woman maintained to the last that she introduced the tent herself, and this is probably true, considering the direction in which it was forced.

Correspondence.

Editor of THE CANADIAN PRACTITIONER:

SIR,—In your issue last month I noticed that Dr. Seibert has again come to the front; not, however, to reply to my questions relative to the local origin of diphtheria, which he acknowledges he is incompetent to do, but rather to hurl at me some contemptuous remarks for

even daring to question the principle of his submembranous injection, and, like many others, I presume considers every person a fool who dares to differ from him. In your issue of February 16 will be found a communication by Dr. Greig, of Toronto, who says: "My opinion is that it is based on wrong principles, but we will wait and watch." Although Dr. Greig believes in the local origin of diphtheria, he does not yet believe in the principle of submembranous injection. Dr. Seibert very adroitly hides himself behind the volumes of Klebs, Lœffler, Oertel, and Heubner, saying to me, "Search these. I know nothing about it; they say so, and I believe them." Well, very probably they are correct; yet, to my mind, there is much yet to be explained in order to account for the various phenomena I enquired for. Now, not having received any satisfactory answers to my interrogatories, I beg leave to say that I shall not trouble you any more on the subject. Before closing, however, let me assure Dr. Seibert, of New York, that Dr. Benson, of Chatham, is not the fool he takes him for, nor is he so "entirely ignorant of even the rudimentary portion of modern diphtheria pathology" as he thinks he is; and let me further advise him, when asked a question he cannot answer (as in this case), to keep cool and acknowledge his ignorance like a man, and not resort to mean, contemptuous, and sarcastic allusions to a person he knows nothing about, and who, I presume, can claim the privilege of asking for knowledge through your journals, even though he subjects himself to utter annihilation at the hands of Dr. Seibert. Thanking you for the space you have allotted to me, and assuring you that I shall not trouble you with any replies to any communication of Dr. Seibert unless he can deal in a more gentlemanly and professional spirit than his last displayed,

J. S. BENSON.

Chatham, June 29.

"JOHN MCDUFFY, charged with vagrancy. What can you say for yourself?" "Not guilty, your honor." "What is your business?" "A professor of bacteriology." "Ten dollars and twenty days—no visible means of support."

Personal.

AT the recent meeting of the American Medical Association held in Detroit, Dr. John L. Bray, of Chatham, the president of the Canadian Medical Association, was formally introduced to the meeting and extended a cordial invitation to attend at our next meeting in Ottawa.

W. J. ASHLEY, M.A., who was for four years Professor of Political Science in Toronto University, has resigned to accept a similar position in Harvard.

DR. T. MITCHELL PRUDDEN, of New York, has been appointed Professor of Pathology in the Medical School of Columbia College.

DR. THORBURN has removed to his new residence on the corner of Spadina Road and Bloor Street.

DR. E. P. GORDON, whose leg was fractured in a football match in Vancouver, has returned to the city.

DR. HORACE BASCOM, of Uxbridge, was married, June 29.

DR. JOHN CAVEN is spending part of the summer at Cushing's Island.

Therapeutic Notes.

TREATMENT OF INTESTINAL DYSPEPSIA.—(Leading Article, *Boston Med. and Surg. Journal*, March 17, 1892.) As this form of dyspepsia is generally, predominantly, a dyspepsia of starches, there is a leading indication to abstain from amylaceous and saccharine articles of diet. There should be a maximum of albuminoids—meat, eggs, fish—and a minimum of carbo-hydrates and fats. Brilliant results have been attained by a diet of raw meat—6 to 10 ozs. of lean beef or mutton, reduced to a pulp and cooked but slightly, if at all; to be eaten well seasoned with a little bread, but without vege-

tables. Thin slices of underdone roast meat, fresh broiled fish, raw oysters and other shell fish, soft boiled eggs, boiled ham, together with sour kraut, smoked herring, a little stale cheese, etc., have been recommended, the latter articles being particularly unlikely to undergo putrefactive decomposition. Chronic indigestion of this type is the result of long-continued dietetic errors, and in its treatment the dietetic plan marked out above should be adhered to as closely as possible. By way of medication, intestinal antisepsis is indicated, and is unquestionably of some service. For this purpose combinations of chalk, bismuth, magnesia, salol. salicylate of soda and naphthol are valuable. The patient may take after each meal a powder consisting of 5 grs. each of prepared chalk, magnesia, and salol, or 5 grs. each of salicylate of bismuth and naphthol. Nux vomica and columbo are also valuable. Diastases often are of service. Either malt or pancreatic diastases may be used. They are to be given during the meal. [They probably act by digesting the starch in the stomach, and favoring absorption of the resulting sugar before it reaches the intestine.] Laxatives often prove beneficial, but must be used judiciously, and with the single purpose of emptying the bowel of its fermenting contents. Rhubarb, senna, aloes, sulphur, cascara, and magnesia are among the best laxatives in this condition. Dr. G. B. Wood says: "The remedy which we have found most effective in the permanent cure of a disposition to the accumulation of flatus in the bowels is an infusion made with ½ oz. of columbo, ½ oz. of ginger, a drachm of senna, and a pint of boiling water, and given in the dose of a wineglassful three times a day."—*Journal American Medical Association.*

OIL OF EUCALYPTUS.—According to an American paper, more than 20,000 pounds of eucalyptus oil were exported to Europe from California in 1891, the popular belief as to its efficacy in influenza having probably created the demand. The beginning of the cultivation of the eucalyptus tree in California dates apparently no further back than 1869, in which year fifty acres in the neigborhood of Haywards were planted chiefly for lumber purposes. Since then enormous numbers of trees have been planted. Some ten years ago it was discovered that a decoction of eucalyptus has the property of removing the scales of incrustation from boilers. The engineers engaged in preparing the fluid for this purpose noticed that those among them who suffered from bronchitis and asthma experienced considerable relief, the credit of which was, rightly or wrongly, assigned to the eucalyptus. From this incidental beginning, an important industry has since sprung up. Whatever may be the real or supposed virtues of eucalyptus in respiratory affections, however, it seems more probable that its sudden rise into popular favor during the influenza epidemic was chiefly due to its reputed antimalarial and microbicide properties.—*Brit. Med. Jour.*

A GERMAN physician has been subjecting the belief that cheese aids the digestion to a chemical test. Cheshire and Roquefort cheese took four hours to digest; genuine Emmenthaler, Gorgonzola, and Neufchatel, eight hours; Romodour nine hours; and Kottenberger, Brie, Swiss, and the remaining varieties, ten hours.—*College and Clinical Record.*

A REMEDY FOR CHRONIC RHEUMATIC ARTHRITIS.—According to Mr. Hugh Lane, in his recent work on "Rheumatic Diseases, the following prescription was found of such service among the pensioners of Chelsea Hospital who suffered from chronic rheumatic arthritis that Lord Anson gave three hundred pounds for the liberty to give publicity to it: R. Honey, ℥xvj; sulphur, ℥j; cream of tartar, ℥j; rhubarb, ℥iv; gum guaiaci, ℥j; nutmeg, No. j. Misce. The patient took two tablespoonfuls in a small tumbler of hot white wine and water when going to bed, and the same quantity before rising in the morning, remaining in bed until any perspiration that was occasioned had subsided. The treatment was continued until a perceptibly good effect had ensued, when only one tablespoonful was administered at a dose until the mixture was used up.—*N. Y. Medical Journal.*

ATROPINE IN BRADYCARDIA.—In the *St. Petersburg Med. Wochens*, 1892, No. 1, Prof. Karl Dehio shows that by the use of atropine we can readily differentiate between the cases of

bradycardia due to vagus irritation and those of the automatic motor apparatus, since this remedy paralyzes the vagus ending in the heart; the four recorded instances show clearly that this method is a valuable one. In studying the association of such anatomical changes as fatty degeneration, fibrous myocarditis, sclerosis of coronary arteries, thrombotic myomalacia, he believes that these conditions are more often present without than with bradycardia. It was further noted that the older the individual the less was the acceleration which was produced by atropine.—*Amer. Jour. Med. Science.*

SULPHUR IN THE TREATMENT OF CHLOROSIS.—Prof. Hugo Schulz (*Med. Neuigkeiten*, No. 17, 1892) recommends sulphur in cases of pure chlorosis where iron has no action. In such cases the general condition is much improved by the use of sulphur. After this drug has been given for a time, the use of iron may be begun again and successfully carried out. On the contrary, it is not well borne in catarrhal and inflammatory states of the gastro-intestinal tract. The form of administration is:

℞.—Flowers of sulphur - - ʒ ijss.
Milk sugar - - - - - ʒ xxv.

Sufficient for ten powders. A knife-pointful three times a day.—*Cincinnati Lancet-Clinic.*

IN the March number of the new *International Medical Magazine*, Dr. Buck says that while heat is one of the best remedies in painful inflammations of the middle ear and the poultice is one of the best methods of applying heat, as usually put on the poultice has little effect. What should be done, he says, is first to fill the external auditory canal with lukewarm water, the head resting on the unaffected side upon the pillow. Then a large flaxseed poultice is applied over the ear as hot as can be borne. The column of water is thus kept warm, and acts as a conductor of heat between the poultice and the inflamed surface.—*Northwestern Lancet.*

TREATMENT OF SINGULTUS.—Dr. Browne *Deutsche med. Wochenschrift*, No. 21, 1892) has treated cases of singultus with success by washing out the stomach after medicinal treatment had been tried in vain. Dr. Leloir reports in the French Academy of Sciences that he has successfully treated this affection by pressing the phrenic nerve at the clavicle, between the two divisions of the sterno-cleido-mastoid.—*Cincinnati Lancet-Clinic.*

EFFICIENT REMEDIES IN DYSENTERY.—The following we find in the *Medical World:* Copious antiseptic irrigations of the colon. Avoid nitrate of silver except in subacute or chronic cases.

Pulverized ipecac, given dry, in doses of twenty to sixty grains. Dover's powder may be substituted in some cases with advantage.

Bichloride of mercury, 1-1000 to 1-1100 grain hourly, in solution.

Sulphate of magnesia, with sulphuric acid, in sufficient hourly doses to produce catharsis.—*St. Louis Med. and Surg. Journal.*

BLACKENING OF TEETH BY ANTIPYRIN.—According to the *Southern Dental Journal*, it is asserted that the internal use of antiyprin blackens the teeth. This peculiarity should be generally known by the profession, and also among the laity, that objections may be made on this account to taking it as a remedy. The blackening is the more intense the more imperfect the enamel, but may be removed by attrition with dilute acid. The considerable use of antipyrin for several years back gives importance to this latter observation. — *Weekly Medical Review.*

SYRUP FOR INFANTILE CONSTIPATION.—

℞.—Podophyllin - - gr. j.
Alcohol - - - dr. iss.
Syrup of red raspberry ʒ iij.

M. Dose—From a teaspoonful to a dessertspoonful every morning, according to the obstinacy of the constipation.—*L'Union Medicale.*

DIARRHŒA.—

℞.—Salol - - - dr. ij.
Bismuthi subnitratis - ʒiv.
Mist. cretæ - q. s. ad. ʒiij.

M. Sig. One teaspoonful every two hours.—*Buffalo Med. and Surg. Jour.*

OBESITY.—A French journal recommends a mode of dieting for curing obesity, which is attributed to an army doctor. A colonel, who was threatened to be retired from the army, as he was so heavy that it required two men to lift him into the saddle, became thin in a few weeks, and to such extent that he had to take means to recover what he had lost. The means consisted simply in not eating more than *one* dish at any meal. It is said by doing this the stomach never takes too much. Nevertheless nothing but the one dish should be taken; no condiments or soups or supplementary dessert should be allowed.—*Med. and Surg. Reporter.*

AMYL NITRITE FOR AFTER-PAINS.—I have had several cases in which the pains were exhaustingly severe, and in which I was glad to turn to nitrite of amyl. This potent drug is a very efficient controller of after-pains, and, used cautiously, I see no reason to apprehend harm from it. A neat way to use it is to saturate a small piece of tissue paper with five or six drops, stuff this into a two-drachm vial, and request the patient to draw the cork and inhale the odor when she feels the pain coming on. It acts with magical celerity.—*Dr. Winterburn in Journal of Obstetrics.*

A USEFUL lotion for sprains, erysipelas, and burns is made by mixing together rectified spirit, 3 fluid drachms; solution of acetate of lead (B.P.), 2 fluid drachms; and distilled water, 6 fluid ounces. Linen cloths wet with this lotion are kept applied to the part affected, and changed as often as they become warm or dry. —*Magazine of Pharmacy.*

CALOMEL is recommended by Dr. J. B. James, of London, as an excellent topical application for hemorrhoids. It is said to relieve all pain and uneasiness, and enables the patient to attend to his usual business without inconvenience.—*Medical Fortnightly.*

VERATRUM VIRIDE is highly recommended for the palpitations and hot flashes of the climacteric.

Miscellaneous.

THE DOCTOR AND THE HOTEL CLERK.—A good story is told of the late Dr. Thayer, of Burlington, concerning his experience at a hotel in Cincinnati, where he stopped while attending a National Medical Congress many years ago. Arriving somewhat late in the evening, he went immediately to bed. Upon inspecting his bill before leaving, Dr. Thayer saw he was charged for a supper the night of his arrival, and inquired as to same, saying he had had no supper that night. "But," the clerk said, "you were here; you *might* have had it." "Oh, well," said the doctor, "I can fix that," whereupon he immediately made out a bill against the hotel for medical services, the amount covering the charge for the supper. Upon presenting the same to the clerk, the latter said: "Doctor, I was not aware we had called on you for professional service." "Oh, no," said Dr. Thayer, "but I was here, and you *might* have done so." The procedure, being so original, so pleased the proprietor that he presented Dr. Thayer with his whole bill, and asked him cordially to make him a visit in the future.—*Dr. J. H. Linsley in Medical Record.*

A NOTABLE instance of the tendency towards specialization in business is offered by the recent action of the long-established drug house known as Stewart W. Johnston, of this city. Observing the already great and rapidly increasing number of specialties for the use of the physician being turned out by the large manufacturers, Mr. Johnston conceived the idea of aggregating all these articles under one roof, and for this purpose disposed of his retail business and organized a joint stock company with headquarters at No. 200 King street west, where they are prepared to fill orders for recent pharmacal combinations, new remedies, absorbent dressings, fine chemicals, etc., etc. The Messrs. Johnston invite correspondence.

THE RESIDUARY LEGATEE.—A very curious case was recently tried at Bolton, in Lancashire, and a decision arrived at which will be interesting to hospital surgeons. A farmer sued the house surgeon of the Bolton Infirmary for £10

the value of the leg of his son, who had been a patient in the infirmary, and from whose body corporate the limb had been amputated. The boy died, and the father claimed as heir at law, the interesting question being discussed whether administration of the estate of the boy had been taken out. In the end it was decided, as in conformity with a previous decision, that there is no property in a derelict limb, and the farmer therefore failed to recover the cadaveric valuable.—*Med. Press.*

A ROYAL LADY MEDICAL STUDENT.—A Royal Princess is studying medicine at the Rangoon Hospital. She is the granddaughter of the late Mindoon Min, King Theebaw's predecessor, and she is desirous of making herself qualified to work as a doctor amongst her countrywomen. She was rescued from captivity with the other members of the king's family on the British occupation in 1885. The Princess is reported to be very clever and accomplished.

SYPHILIS A BAR TO MARRIAGE.—The Court of Appeals of Kentucky have recently decided that syphilis, pleaded in answer to an action to recover damages for breach of promise of marriage, is a complete defence, following the decision of the Supreme Court of the State of North Carolina, in which the same defence was interposed and sustained in a similar action.—*Weekly Medical Review.*

HARVARD MEDICAL SCHOOL has adopted a compulsory four years' course which will be required from all who enter next fall. Students in classical and scientific schools in which courses in anatomy, physiology, and chemistry are taught will be admitted to advanced standing on passing an examination.

THE sixth annual meeting of the American Orthopedic Association will be held in the New York Academy of Medicine, September 20th, 21st, and 22nd, 1892.

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THE

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EDITOR:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

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TORONTO, AUGUST 1, 1892.

Original Communications.

HAY FEVER.*

BY DR. A. B. WELFORD, WOODSTOCK.

Gentlemen: It devolves upon me, owing to the illness of Dr. Hodge, of London, to prepare a paper on "Hay Fever." I have done so, not so much with the expectation of giving you anything new on the subject, as it is one with which I have had no practical experience whatever, but more in the anticipation that in the discussion which will follow something new, interesting, and valuable may be added to the subject, more particularly in the line of treatment. Under these circumstances, gentlemen, I trust you will not be too severe in your judgment of the originality of my meagre paper.

Bostock, an Englishman, appears to have been the first physician who recognized hay fever as a particular affection, as early as 1819, although it was described as a disease producing sneezing, headache, itching of the nose, and followed by spasmodic asthma, after the inhalation of the odor of roses and sweet-smelling plants, by Botallus as early as the sixteenth century. The disease seems much more prevalent now than it was thirty or forty years ago. Its victims are principally among the better-educated people, more particularly those of a nervous temperament. This fact may be used as an argument by those who do not believe in the higher education of the masses; and also as an excuse for the colleges to prevent overcrowding in the professions. The disease was comparatively little known in any country excepting England up to as late a date as 1862, at which time it was written about by Phœbus, a German physician, although Drake, an American, had published notes of a case of the autumnal variety in 1854; but in no country has it attracted more attention or more valuable literature been added to the subject, especially of the autumnal form, than in the United States.

The causes may be divided into (1) predisposing, (2) exciting.

(1) *Predisposing causes.* Hereditary tendency is undoubtedly one, as the statistics of every year more strongly testify, as a number of authentic cases are on record where two or three generations of the same family have been attacked with the disease. Males seem to be more liable than females; this may possibly be accounted for by the greater opportunity of exposure to its causes by the former. It does seem strange that with so many thousands being exposed to it such a small percentage should be attacked, showing undoubtedly that there is an individual peculiarity in some persons rendering them susceptible to its influence. Negroes and the natives of India are proof against it. The time of life when one is more susceptible to it is in youth or middle age; rarely is it contracted after forty. Geddings, in his article on hay fever, in 1885, says that other affections of the respiratory tract do not seem to predis-

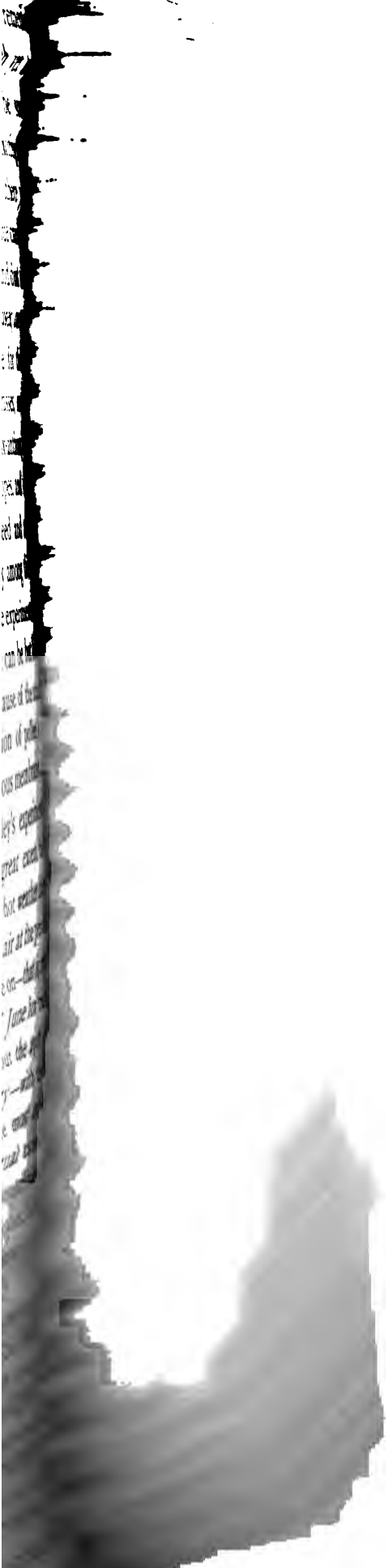
*Read before the Ontario Medical Association, Toronto, June 1st, 1892.

pose to it, nor does it in turn produce any of the other respiratory affections. Bosworth says, in 1889, that it is a generally accepted view that previous catarrhal affections powerfully predispose to the development of hay fever. A local morbid condition of the mucous membrane is probably present in all true cases of hay fever as a predisposing cause, and is, no doubt, brought about by an obstruction in the anterior part of the nasal cavity, giving rise to a diminution of air pressure immediately behind the obstruction in every act of inspiration. This process continuing for a length of time will necessarily result in a permanent dilatation of the blood vessels of the soft, spongy tissue covering the lower and middle turbinated bones, thus rendering the local conditions much more favorable to the production of the peculiar train of hay fever symptoms when the pollen is implanted thereon.

A psychical influence is believed by many to be a predisposing cause, and this is not the only disease that there are very good reasons for believing that the influence of the mind has a most powerful effect in precipitating. When we consider how variable the flowering time of certain plants is, owing to the great variations of the climate at the same time of year in different seasons, and yet, notwithstanding the peculiar regularity of the attacks in hay-fever subjects, there seems to be a considerable discrepancy between cause and effect. Nevertheless it may be in the main true that at that season when the atmosphere is most heavily laden with pollen, hay-fever patients may be more generally attacked, according to the experiments of Blackley; but when we know that in the case of John McKenzie (who was himself a sufferer), which was reported in the *American Journal of Medical Science*, 1886, where an attack of rose-cold was brought on by smelling an artificial rose, and also of an attack precipitated in a patient of his by looking at a picture representing a field of hay, there must be more truth than fiction in the influence of the mind doing its work as faithfully as pollen. When we consider the physiological or pathological condition of the nerve centres produced by this mental influence, we may be endeavoring to explore that "Darkest Africa" of our minds where eccentricity ceases and monomania begins

(2) *Exciting causes.* Hay fever affords a most striking proof of the fact that where so large a number of different remedies are suggested, there is more truth yet to be found out before a specific can be sought for, or named; and where so many exciting causes can be given as in this disease, there yet remains great uncertainty as to the true causative agent. Moist air, heat, sunshine, and dust are in themselves probably not true causes, but render the conditions more favorable for their development. The flowers of grasses, more particularly those of the anthrox-anthum, odoratum, geraniums, roses, heliotropes, and other sweet-smelling flowers, ragweed and ambrosia-artemisiæfolia, are probably among the chief causative agents. From the experiments of Blackley, of Manchester, there can be but little room to doubt that the true cause of the attack is to be found in the deposition of pollen of flowering plants upon the mucous membrane of the upper air passages. Blackley's experiments seem to confirm to a very great extent the theory of Bostock, that in dry, hot weather there is more pollen diffused in the air at the periods when the attacks generally come on—that is, from the last of May to the 10th of June for the spring variety (rose-cold), and about the 29th of August for the autumnal variety—with this difference, that Bostock believed the most air, heat, and sunshine to be the actual causes, when, no doubt, they were only the conditions favorable for its development. Is pollen the cause of the exacerbations, or is it the cause of the disease itself?

Pathology. The written pathology of hay fever is rather limited. The changes which take place are not those of an ordinary inflammatory process, the latter going through certain definite changes and ending in gradual resolution. In hay fever the outset may be gradual, but in the majority of cases it is quite sudden, and its termination the same. The natural physiological action of the nasal mucous membrane is a gradual process of exosmosis of a watery fluid, varying in different people from 8 to 12 ounces, or more, in 24 hours, the amount and character being regulated by the sympathetic system of nerves according to the atmospheric changes. In hay fever the impact of pollen produces a more or less complete paralysis of the nerves



the very common affection known as cold in the head, with almost constant and prompt relief. Although it varies but a trifle from the combination in use for hay fever, it possibly may be found more useful, and, besides, I feel in duty bound to offer something original, the latter being the only originality I can hope to claim in this paper.

A PREDISPOSING CAUSE OF HAY FEVER.*

BY R. SHAWE TYRRELL, M.D.,
Lecturer on Medical Jurisprudence at the Womans' Medical College, Toronto.

Mr. President and Gentlemen: The paper which I am about to read to you on hay fever has been prompted by a personal experience of the malady, extending over a period of sixteen years; and although I ought to be able to write somewhat in detail on the subject, inasmuch as experience is, in many cases, the best master, I feel diffident in expressing a theory upon what might be considered insufficient grounds. Yet because there has been so much want of unanimity in the treatment of the affection, and so much has occurred yearly by the enforced absence of ourselves or our patients from professional or other work, not to speak of the personal annoyance occasioned by the disease itself, I consider that I am justified at any rate in stating my views to you, and in doing so to endeavor to elicit information regarding this troublesome autumnal catarrh.

I myself have enjoyed no immunity by medicinal measures from the regular recurrent attacks until the year which has just passed. In other words, I have had my annual attacks with pitiful regularity for a period of fifteen years, and finally succeeded in missing a season. I do not wish to place too much importance upon this fact, inasmuch as I am aware that one swallow does not prove the existence of summer; but I hope that you will be able to acknowledge that at least my theory will apply to a considerable number of cases, and, if so, I will feel that I have been the means of conveying to you some small amount of benefit.

And now proceeding to state my views without any discussion on the literature of the subject, and having regard to no theory, however plausible, that has, so far as I know, been advanced, but speaking simply from what has fallen under my own observation, I would at once call your attention to what I consider to be the most important predisposing cause of hay fever, excluding altogether from the paper all other causes.

The cause I refer to is lithæmia, and, in discussing this as one of the causative agents in the production of this disease, it will perhaps be as well to simply enumerate the causes of lithæmia, and then to consider these in reference to hay fever.

Now the three causes which have been assigned as occasioning this imperfect oxidation of nitrogenous matter in the liver, resulting in the production of insoluble lithic acid and lithates, are an excess of food, want of exercise, and derangement of the liver and kidneys, any or all of which will bring about this excess of lithic acid, which, in circulating through the blood, produces symptoms that are of a very unmistakable character, and which I have recognized as being present in a considerable number of cases of hay fever that have fallen under my observation. Then, again, defective action of the kidneys, either from functional disorder or organic disease, has the effect of retaining in the system the lithic acid or lithates which may have been excreted by the liver in normal quantity, and hence you will have the same effects produced, viz., those disorders of digestion which are so common in everyday practice. But if lithæmia is so common, you may ask me how it is that hay fever is not so also, to which I would reply that it is simply *one* of the manifestations of this lithic acid and its salts. It will frequently be observed that one son of a gouty father will develop bronchitis, while another will inherit his parent's disease; and if gout and bronchitis be so closely allied, is it unreasonable to suppose that this hypersensitive condition of the nasal mucous membrane may not be due also to lithic acid, provided, of course, that these parents suffer from other symptoms which point to an excess of this acid in the blood? I think that it will readily be admitted that hay-fever patients have a more or less tender condition of the nasal mucous membrane all the year round, although in some more than others, and this sensitive condition you will notice to be frequently aggravated at any

*Read before the Ontario Medical Association.

season by some excess in diet or inattention to the functions of the excretory organs. How often do you notice a so-called "cold in the head" as a consequence of one's indiscretion in diet; and I think that it would not be inferring too much to say that if to this "cold" be added certain conditions of the atmosphere, we might expect at least that the patient would suffer from a more or less aggravated attack of nasal catarrh.

I have stated that an excess of food was one of the causes of lithæmia, and have drawn an inference that it also was one of the causative agents in the production of hay fever; and although this in the main may be true, yet I think it would be well to qualify this statement by the remark that an excess of some kinds of food, or even some varieties in any quantity, will provoke or increase this excretive condition of the mucous membrane of the nasal passages.

It would be going too much into details to discuss food of all kinds as it relates to my subject in this paper; but it will be sufficient for my purpose to state that I have found those varieties of food which provoke symptoms of lithæmia all the year round are highly provocative of attacks of sneezing during the hay fever season.

I have mentioned a sedentary life, or want of exercise, as a cause of lithæmia, and of *them* all I think this one holds a prominent place, for proper disintegration cannot go on in an inactive body, neither can elimination of the waste products of the system take place satisfactorily; which, being granted, I have frequently observed during active and steady exercise in the hay fever season that I would be almost entirely free from the distressing affection. One year I remember having made a somewhat lengthy canoe trip, using the paddle myself, and in this way obtained almost complete immunity throughout the entire time, although the district in question was by no means one in which the atmospheric influence was favorable, and I have found on numerous occasions that the prostration which is so pronounced a symptom with so many persons gradually gives way under the influence of forced exercise.

I have now referred shortly to food and exercise in relation to hay fever, and it will only be necessary to mention the third and last cause of lithæmia, viz., an inactive liver an kidneys, resulting either from organic disease or functional disorders, and I have frequently observed that the symptoms of hay fever may be considerably modified and distress mitigated by promoting an increased action of these organs; and, hence, I think it not improbable that defective disintegration of albuminous substances in the liver, as well as some defect in the eliminating power of the kidneys, may be responsible to a certain extent for the occurrence of this disease.

It has been well established that gout is hereditary. It has also been made manifest that disordered conditions of the liver descend from father to son, and it has more recently become evident that hay-fever patients beget children who have a strong tendency to their parents' malady. This, of course, is no proof in itself that these disorders are due to the same cause; but it is, to say the least, a straw pointing to the direction of the wind.

And now as we are sometimes able to diagnose certain conditions by the treatment adopted, the reference which I have taken the liberty to draw, viz., that lithæmia is a causative element in hay fever, may be verified to a certain extent by my method of treatment, which I will proceed, in as few words as possible, to place before you. I myself, being of a lithæmic habit, have had frequent opportunities at all seasons of testing different drugs with a view of combating this lithic acid, and before mentioning the particular medicine which I have found of most value, not only in the more common symptoms of lithæmia, but also in hay fever, during the past season, I may merely refer to some of the classes of medicines which are frequently prescribed; and to make a pretty bold statement, I have found no benefit from any of the neurotics.

Stimulants are of a very evanescent value, and on the whole are better avoided, inasmuch as the reaction which follows their use is accompanied by great depression.

Tonics I have found of very doubtful benefit, although they ought not to be entirely discarded in many cases.

Mercurial cathartics were of considerable value in all the cases of lithæmia that have come under my notice, and the remark applies also to

hay fever; but as it is difficult or impossible to administer them daily, I have not been able by their employment to obtain anything like complete immunity from the disease, although I have often experienced decided relief.

Diuretics and diaphoretics are of especial value, not only in the more common manifestations of uric acid, but also in hay fever, and claim more than a passing notice, especially when they also combine the property of a purgative, for it was by a medicine of this class that I succeeded in avoiding an attack during the month of September last. I refer to the salicylate of soda, which acts with me as a laxative, diaphoretic, and diuretic when taken at the proper time.

I may say that I have used the drug for several years, occasionally, to combat lithæmic symptoms, and always with the happiest results, so that it was not unnatural that I should have been led to try it for the relief of autumnal catarrh. I accordingly, two years ago, took a dose of about gr. xx on retiring every night, which had the effect of relieving the symptoms very materially; in fact, to such an extent that I escaped the cough which had in previous years always commenced about the 10th September, and continued for a month or longer. I may remark in this connection, however, that this dose taken at night did not act as a decided laxative, but only had the effect of a diaphoretic and diuretic.

Last year I commenced the drug on the 20th August, being a few days before the time when my attacks commence, and, instead of taking gr. xx at bedtime, I took about gr. xv before breakfast. This had the effect of a mild purgative, apart from its action on the skin and kidneys, and by this means I think I succeeded in eliminating the excess of uric acid from the blood, or, at all events, I succeeded in escaping an attack of hay fever. I do not wish to maintain that the dose would be a suitable one for all patients, as I know it would not; neither do I think that one dose in the day would be sufficient for many patients, but I place considerable importance in the fact that if taken before breakfast the best results are obtainable.

It may be urged that the skin does not eliminate uric acid from the blood, but if this be the case diaphoresis would in another way have a salutary effect by preventing congestion of the liver and kidneys, and thus in reality assisting their action; and I may conclude by saying that I think it is not outside the bounds of probabilities that, the successful treatment of the more common forms of lithæmia and hay fever being identical, the causes, if not the same, are more or less closely allied, and hence we may have this abnormal condition of the blood, as represented by some writers, explained in the way which I have endeavored to elucidate.

A CASE OF RHEUMATIC AFFECTION OF THE EYES, ASSOCIATED WITH CHRONIC RHEUMATISM, TREATED BY PILOCARPINE.*

BY G. H. BURNHAM, M.D., F.R.C.S. EDIN., M.R.C.S. ENG.,

Oculist and Aurist to the Toronto General Hospital, Clinical Lecturer on Ophthalmology and Otology in the University of Toronto, etc.

Rheumatic affections of the eyes are always serious, and especially is this the case when at the same time there is present a general rheumatic condition of a progressive character. I am now going to speak of this affection in reference to the eyeball solely; the external muscles and surrounding structures are not to be dealt with. This disease may attack the cornea, iris, and the deeper structures either separately or implicate more than one. Its seriousness does not arise so much from the consequence of the first attack as from its well-known characteristic of relapsing, which latter may become so frequently repeated as finally never to leave the eyes free. The affection beginning in the cornea by a small infiltration may quickly subside, only, however, again to reappear, and finally the cornea becomes studded with closely-placed small infiltrations, and the vision becomes much impaired.

Rheumatic iritis is even more intractable, and the attack is rightly said to be obstinate, painful, and recurrent. The same remarks apply to the sclera, ciliary region, choroid, and vitreous.

It is thus easily seen how dangerous such a disease becomes when the deeper structures are involved. As a rule, in frequent relapses, the

*Read before the Ontario Medical Association.

disease spreads from one structure to another in the eye, and, as a final result, there may be not only loss of sight, but also, eventually, destruction of the eye, and even sometimes excision of the eye on account of the severe pain.

I have given this brief summary in order to impress upon you the necessity and value of successfully grappling with so persistent a disease. I shall now give an illustration by narrating a case in which the success of the treatment followed has surpassed my expectations.

On November 29th, 1890—that is, one year and a half ago—Robert M., æt. 50 years, was sent to me by Dr. Tucker, Orono. The general condition was that of chronic rheumatism, as stiffness, pain; some of the joints, especially the ankles, tender to the touch; swollen especially after rest; general health very fair; great loss of weight; muscles beginning to atrophy; hair almost white; in fact, so crippled was he that it was with difficulty he walked into my consulting-room by the aid of a stout cane. His occupation is that of a farmer and agent for agricultural implements, which entails a good deal of exposure. This latter seems to have been the chief cause of the disease.

The condition of the eyes was serious. The centre of each cornea was studded with closely-placed and small infiltrations, occupying a space greater than the pupillary area. In the left eye these spots were beginning to assume an appearance of almost calcareous degeneration; no iritis, the pupils being active and dilating fully under atropine. With the ophthalmoscope the vitreous was slightly hazy. No changes were seen in the fundus. This view could be obtained through the surrounding clear cornea. This haze of the vitreous was regarded as serious, pointing to a gradual extension to the deeper structures.

The first attack of the eyes began about two years ago. After each relapse the eyes were quiet, but the intervals became shorter and the relapses more severe, till, at the time of consulting me, the vision of each eye was very poor, viz., no letters of Snellen's type at 20 feet, and only a few letters of No. 20 of that same type at 6 inches with proper presbyopic correction, and the left No. 15 of the same type. He could not even guess the time on looking at the face of a watch with large figures and hands. He said after each relapse the sight was much worse. He informed me that he had been under the care of a specialist, and, though given careful treatment by local and constitutional remedies, his eyes were now rapidly getting worse. In order to arrest the disease, an iridectomy had been advised.

On placing himself under my care, I at once began the hypodermic injection of pilocarpine. He remained with me for the period of three weeks, and during that period I gave an injection every day, the quantity varying from gr. $\frac{1}{8}$ to gr. $\frac{1}{2}$. Before he left he could easily make out the time by the watch. He returned every two months, and remained each time from eight to ten days, receiving a hypodermic injection every day.

From the beginning of the treatment there was a constant uninterrupted improvement both of the eyes and general condition. The eyes have progressed most satisfactorily; no relapse has occurred, and now he reads words of ji., and $\frac{20}{100}$, with a good attempt at $\frac{20}{70}$, Snellen's type. The reason that ji. is not read more clearly is that the corneal haze is greater below than above. The corneal infiltrations have so changed that to the ordinary observer the eyes seem almost clear, whereas at the beginning their condition was most plainly evident. I now feel persuaded that this absorptive process will continue till each cornea becomes clear.

I may also mention that I used a solution of eserine, gr. $\frac{1}{4}$ ad. $\frac{3}{3}$i., once daily on retiring, during a considerable part of the time. This, however, was only regarded as an aid, but almost valueless of itself.

I gave the injections in the afternoon, pursuing the following routine: He went to bed clothed in a thick flannel suit. The temperature of the room was 70° to 80°. The perspiration which ensued after using the medicine was usually so profuse as not only to soak the flannels, but also to wet the sheets, and the saliva ran very freely from his mouth. After its employment the patient did not venture out that day, but the next he did so freely, always, however, remaining in an hour or so before the medicine was again used. Three hours usually elapsed from the time the injection was given till he

could again assume his usual clothing. Before dressing he was always well rubbed with warm towels. Each day, bathing the wounds in the forearm caused by the needle with lead lotion prevented any local inflammatory reaction. In giving the medicine, let the first dose be light, say ⅛ gr., so as to avoid unpleasant nervous symptoms; do not give so much as to cause vomiting, though the stomach may sometimes feel uneasy. Also let the dose be small, or miss a day if the tension of the eyes has a tendency to remain subnormal, or uncomfortable sensations are persistent. I should also advise great care in its use if there is noticed any peculiarity or suppression of the usual physiological effects. The change in this man's general condition as well as in that of his eyes has been reliable and thorough, and I believe he will regain almost or full normal vision. This man, who, when he first presented himself, could with great difficulty walk across a room by the aid of a stout stick, can now plough and do a good day's work. I may also mention that his weight has increased twenty pounds.

The use of pilocarpine in many and very varied diseases of the eye is well known, but I think that this is the first time it has been used so long and continuously in this disease with such excellent results. The effect regarding the general rheumatic condition has been fully as satisfactory as that of the eyes.

Even Dr. Noyes, in the well-known and most recent edition of his book on diseases of the eye, mentions it with little enthusiasm as a remedy in rheumatic affections of the eye. Dr. Osler, in his most excellent treatise on medicine, says of chronic rheumatism, "Internal remedies are of little service."

I think I am justified in regarding the outcome of the treatment of this case as satisfactory and encouraging both to the general physician and oculist.

I may mention that he is still under my care, and I purpose, on another occasion, to give the final result.

Pilocarpine may act by so increasing physiological action generally that absorptive processes are made unduly active, and this being kept up for a long time uninterruptedly gives the final issue of a return to health of the affected parts.

Selections.

ASPIRATION IN PNEUMOTHORAX.

BY G. A. SUTHERLAND, M.B. EDIN., M.R.C.P. LOND.,
Physician to the North London Consumption Hospital.

Amongst the many complications of phthisis none causes greater anxiety than pneumothorax, the mortality of which, according to Dr. Samuel West's statistics, is 66 per cent.* The line of treatment usually adopted is expectant, but that some more active interference may be carried out with advantage is illustrated in the following case:

H. V——, aged thirty-two years, was seen for the first time on Dec. 15th, 1890. He had been in India for several years, and had suffered from ague and dysentery. He had had rheumatism occasionally, and, when a boy, had brought on a "strain of the heart" by running races. There was a family history of phthisis. He stated that he had had sickness and vomiting after dinner for a few days, accompanied by the old malarial symptoms. On the previous night he had coughed up blood seven or eight times. There had been no sweating or loss of flesh. He was poorly nourished, and very much pulled down. The chest was well formed, and no evidence of disease of the lungs was detected on physical examination. As regards the other organs, the only point noted was a reduplicated second sound at the base of the heart. There was a slight attack of hæmoptysis next day, and the temperature in the evening was about 101° for a week, after which all symptoms disappeared, and he resumed his work in the following month. Two months later there was a recurrence of the hæmoptysis, with cough and profuse mucoid expectoration, which was found to contain tubercle bacilli. The only sign of pulmonary disease detected was slight crepitation near the root of the left lung posteriorly. He was sent to Ventnor in March, preparatory to leaving England for the Cape at the end of the summer. In May, 1891, he returned to town very much worse. He had lost flesh and was troubled with violent cough, followed by sickness and great depression. There was slight pyrexia in the afternoon and sweating at night. The left lung showed dullness at the

The Lancet, vol. 1, 1884, p. 791.

apex anteriorly, and over the upper third posteriorly, with blowing breathing and crepitation, and friction sounds were heard over the left scapula. No evidence of disease was detected in the right lung. On June 22nd, after severe and prolonged coughing, he was seized with acute pain in the lower part of the left chest, passing from the front to the back, and accompanied by headache, sickness, sweating, and great prostration. The temperature was 104°, pulse 120, and respiration 32. The decubitus was right-sided. The cardiac sounds were inaudible to the left of the sternum, but louder than normal to the right of it. Expansion was very slight on the left side of the chest, and vocal fremitus was entirely absent. The percussion note over the front of the left lung, from the clavicle downwards, and including the cardiac area, was hyper-resonant, and this condition existed also in the axilla, and posteriorly from the middle of the scapula to the base. Over this area the breath sounds were almost inaudible, and the vocal resonance was very much diminished. The breath sounds were more inaudible along the left side of the spine. The expectoration was muco-purulent, blood-stained, and contained many tubercle bacilli. The treatment adopted was nourishing fluid diet, alcohol, and morphia in full doses, both hypodermically and by the mouth, which soon checked the troublesome cough and retching, and the severe chest pain which these caused. He had occasional attacks of dyspnœa with cyanosis. The decubitus became left-sided, any other position causing him acute pain. The strength was well maintained until the third day, when the temperature again rose to 104°, and there seemed to be an increase of pressure in the chest, followed by progressive weakness. On the eighth day of the attack he became much weaker, and at midnight his condition was critical. There was muttering delirium, the respiration was 36 per minute and very labored, and the pulse was so weak and irregular that it could not be counted. There was a uniform distension of the left side of the chest, with complete absence of expansion, and vocal fremitus. The area of hyper-resonance extended one inch and a half to the right of the sternum, and the cardiac apex was felt one inch internal to the right nipple. The breathing over the hyper-resonant area was distant amphoric, with occasional tinkling rales, and the "coin sound" was well marked. The heart sounds were faintly audible to the left of the sternum. It was resolved to puncture the chest for relief of pressure. The needle of an aspirator was inserted into the left pleura in the axillary region, but no air passed out. The aspirator was then attached, and the air in the receiving bottle was partially exhausted. On opening the connection, air was at once heard to pass into the bottle, and by means of slow and interrupted aspiration a considerable quantity of air was removed from the pleural cavity. The process occupied about an hour, and the patient's condition was manifestly improved. The respiration fell to 24, and the pulse to 108, becoming at the same time fuller and stronger, while the heart sounds could be heard much more distinctly to the left of the sternum. On the following evening there was a recurrence of the cardiac weakness, and an area of dullness at the base of the left lung posteriorly was noted. Aspiration was again performed. At first air only was withdrawn, then air mixed with fluid, and finally nine ounces of clear fluid were evacuated. A friend who was present noted the change in the position of the cardiac apex during the process, and found that it moved three-quarters of an inch to the left, while the pulse again showed marked improvement. There was no cough on either occasion. A few days later expansion became evident on the left side, with sinking in of the intercostal spaces during inspiration, and the breath sounds became louder, blowing in character, and in parts amphoric, with tinkling accompaniments. At the end of a month, progress being delayed by a slow formation of fluid in the left pleura, with displacement of the heart to the right, the chest was again aspirated and thirty-four ounces of clear fluid withdrawn. He then improved rapidly, and in September he was found to have gained eleven pounds and a half in weight, and could walk four miles without fatigue. There remained impaired resonance over the left side of the chest, but the expansion was fairly good, and the breath sounds, although weak, were audible all over. He sailed for the Cape on Oct. 8th, 1891, and has continued in good health.

Treatment by aspiration is not advised by the leading authorities in cases of pneumothorax. Dr. Douglas Powell* speaks of the timely introduction of a fine trocar, when there are signs of increasing pressure within the chest, but says nothing about aspirating the pleura for air. Dr. Wilson Fox† refers to the treatment by a simple trocar, but says that "aspiration is best avoided; it brings with it the danger of renewing the fistulous opening, and this effect has actually been observed in a secondary effusion following pneumothorax." Dr. Hilton Fagge‡ says an aspirator should never be used, on account of the danger of reopening the original aperture. It is evident that the use of a trocar will only be of service when the pressure of air in the pleura is greater than that of the atmosphere, which, according to Dr. Hilton Fagge, is by no means generally the case. On the other hand, Dr. Douglas Powell has shown that lateral displacement of the heart occurs in pneumothorax owing to the normal elastic retraction of the sound lung, which drags over the mediastinum, even when the pressure of air is not greater than that of the atmosphere. If, then, the use of a simple trocar be accepted as the final treatment in the cardiac asthenia of pneumothorax, we cannot expect very great relief in cases in which the intra-thoracic pressure is not greater than that of the atmosphere. The dangers of slow aspiration in suitable cases have perhaps been exaggerated, and the above case shows that the benefit may be very marked. In considering the question of aspiration one point must not be lost sight of, namely, that an attack of pneumothorax, by giving rest to the affected lung, may be a most effective therapeutic agent in phthisis. This patient's phthisical condition at the onset of pneumothorax was very serious, and was rapidly getting worse, while two months later no evidence of active phthisical mischief could be detected, nor has any since appeared. It is probable that the compression of the lung, at first by air and later by fluid, had brought this about, and that a repetition of the aspiration, except when urgently called for, might have prevented this good result. In the management of the above case I had the benefit of several consultations with Dr. Cheadle, to whom my best thanks are due for much valuable assistance and advice.

[NOTE.—Writing on May 2nd, patient states that a large amount of fluid was withdrawn from the left pleura in January, that no signs of phthisis are present, and that he is well and strong.]—*Lancet.*

*Diseases of the Lungs, p. 142.
†Diseases of the Lungs and Pleura, p. 1118.
‡Principles and Practice of Medicine, vol. ii., pp. 192, 199.

SUBSTITUTION AND ITS ATTENDANT EVILS.

BY JOHN AULDE, M.D., PHILADELPHIA.

The evils attendant upon substitution and sophistication of remedial agents have long been surmised; they have not, however, until recently, received attention at the hands of the medical profession. Increased diagnostic skill, along with greatly improved facilities for the manufacture of medicaments, favor an approach towards mathematical exactness in computing therapeutic results. When these are wanting, we challenge the character of the remedy. The question which presents itself is: Has our patient received the true medicament or a base counterfeit? However attractive in theory, it will be found impractical for the medical profession to drift away from the pharmacists, and it should be our aim to reward the faithful and bring the guilty to punishment. The friendly bond between the two professions should be honesty, as neither can afford to work independently: there is an interdependence which makes them mutually helpful.

It is said of Lawson Tait that he has returned to first principles, and carries a mill with him, so that when ergot is needed he prepares it fresh with his own hand. The reliable character of Squibb's ether has been maintained through his business sagacity in having it prepared chemically pure and distributed over all the world in sealed cans, thus precluding the possibility of sophistication or substitution.

The life of a patient suffering from rheumatism may depend upon his being supplied with sodium salicylate prepared by a combination of Merck's chemically pure bicarbonate of soda and true salicylic acid obtained from oil of wintergreen, and yet few pharmacists, even in large cities, pretend to keep either in stock. They are the exception in Philadelphia, and doubtless the same is true of other cities.

Some years ago Dr. Squibb, of Brooklyn, set his seal on Marchand's peroxide of hydrogen by endorsing its character and defending its merits as the most powerful and yet harmless bactericide which could be employed in the treatment of various formidable and fatal diseases. Dr. Robert T. Morris, Dr. Paul Gibier, and other well-known authorities have corroborated his statements from clinical observation, and as a consequence a revolution has taken place in our methods of treatment in both medical and surgical practice. The efficacy of this simple remedy, its innocuousness and extended field of application, have shed a flood of light upon modern therapeutics, but at the same time there has followed in its train a host of worthless imitations.

The substitution of the commercial for the medicinal peroxide is calculated to work serious injury, and destroy our confidence in a most potent remedy. In the treatment of diphtheria, for example, the commercial product is positively harmful. When death results, shall we blame the attending physician or the unscrupulous druggist who substitutes a base imitation for the genuine product? And still, pharmacists who claim to be respectable do not hesitate to trifle thus with human life. Is it any wonder, then, that our mortality percentages are on the wrong side?

Cascara sagrada has been counterfeited and sophisticated until it is almost impossible to secure a reliable preparation of this most useful medicament, although Parke, Davis & Co., the pioneers in its introduction, have adopted every means in their power for the protection of the medical profession. Antipyrin, a patented preparation, has met with phenomenal sales, and possesses distinct therapeutic properties, and as a result imitations and substitutes are offered to take its place in medical practice. Whether these imitations are better or worse than the original product, I do not care to discuss; neither is it for the druggist to decide. The decision here, as to any special remedy or preparation, rests entirely with the physician, as he alone is responsible for the condition of his patient; no one else, not even the druggist, should be permitted to interfere with his directions. Substitution is an evil which should be guarded against; it is an evil which must be eradicated, or the entire medical structure will collapse. It is a duty we owe to ourselves and to our patients to look after his unnatural condition of affairs in which we are so vitally interested, and the time is near at hand when a systematic effort must be made with a view to accomplish the desired end.

This subject is commended to the attention of the American Medical Association, with the suggestion that a committee be appointed who shall recommend suitable measures for the protection of the medical profession from the evils of substitution and sophistication on the part of unscrupulous pharmacists. Shall we have a "list"?—*Jour. of Amer. Med. Asso.*

REMARKS ON TWO CASES OF INSANITY CAUSED BY INHALATION OF SULPHURETTED HYDROGEN.—*Case 1.*—B. H., æt. 30, was admitted into Rainhill Asylum, September 20th, 1888. There was no history of insanity in the family. The patient himself was said never to have had any illness, but he appears to have drunk somewhat. He was a single man and a laborer in some chemical works. On the morning previous to his admission into the asylum he went to his work as usual. About 9 a.m. he was observed to be acting strangely, throwing his arms about wildly and shouting. In addition, he lost power over his legs. As he was engaged in an occupation which exposed him to some chemical fumes (probably sulphuretted hydrogen), it was supposed—apparently with very good reason—that he had inhaled the gas. He remained excited and rough all that day, laughing and shouting by turns, and did not appear to recognize his brother. When admitted into the asylum on the following day he was in a very maniacal condition, shouting and throwing himself about, and it took several men to carry him to the ward. He kept throwing his arms about, but was distinctly unsteady on his legs when made to stand. In bed he wriggled about, throwing his head back on the pillow and waving his right arm round and round. This condition of things lasted for two or three days, when he became more quiet; and he then gradually passed into a taciturn, depressed state, sitting or standing about for hours doing nothing, and never speaking except when addressed. After remaining in this condition for

chiefly deals with the second. Against the growing interest in athletic matters there are constantly urged objections to the effect that many perfectly healthy young men are injured beyond repair by strains and shocks to vital organs received in the course of training or competitive sports even among those who avow much confidence in the value of physical exercise; yet many declare the pity of it because such havoc is wrought thereby. Instances are cited, rather vaguely it is true, of fine fellows utterly wrecked by contests on land or water, of lives cut short by overtasks at so-called sports. After pointing out how important it is for medical men to define and point out dangers and urgently insist on their avoidance in such cases, Dr. Taylor proceeds to argue that even the best and wisest of medical teachers can err in opinion, and cites as an example an assertion of Dr. B. W. Richardson: "I venture to affirm there is not in England a trained professional athlete of the age of thirty-five who has been six years at his calling who is not disabled"; and the same author as saying: "When the artificial system of training ceases, the involuntary muscles, the heart especially, remain in strength out of all due proportion greater than the rest of the active moving parts of the organism." Dr. Taylor maintains that this authoritative statement has swayed the judgment of thousands of thinking men. He has had these views on the damage done to involuntary muscles quoted to him again and again. Such cases he considers are indeed possible, and from such causes do they come in the laborious ranks of iron-workers and those who put forth in long days excessive and continued muscular exertion. Among professional athletes the heaviest strains must come, as upon the output of the most concentrated force alone comes to them honest reward. Dr. Taylor has collected the brief histories of a score of these men now living, which he thinks at least illustrate how vigorous and sound such men may be even long after the age limit which Dr. Richardson has assigned to them. These histories are interesting, and some of them very remarkable, and Dr. Taylor is strongly of opinion not only that the judicious pursuit of bodily exercises, either in the line of ordinary avocations, special duties, or sports, tends greatly to maintain and enhance the vigor of both body and mind, but also that the hurtfulness of severe muscular exertion short of profound exhaustion is merely temporary and recoverable, and that dangers to internal organs and vital centres are comparatively rare. —*Lancet.*

A GREEK MEDICAL WORK 2000 YEARS OLD. —In the last number of the *Classical Review* Mr. F. G. Kenyon, of the British Museum, who last year edited the newly-discovered papyri of Aristotle and Herondas, describes another similar manuscript recently obtained for our national collection, which contains an ancient treatise upon Medicine by a Greek author, probably of Alexandria. The work, which has apparently hitherto been lost, is of much interest, and the following *résumé* of the state and contents of the manuscript condensed from Mr. Kenyon's report will indicate its importance. The papyrus is of tolerable size, measuring twelve feet, and bears thirty-nine columns of writing, each about three inches in width. Towards the end the writing is more compressed, and the concluding portion, which comparatively contains the largest amount of matter, is fortunately in exceedingly good condition, but the other parts of the papyrus are both torn and rubbed and the text frequently barely legible. As to the treatise itself, the first eighteen columns are devoted to quotations from earlier writers as to the origin of diseases, and present to us so many quotations from Greek medical authors of the earliest times that if the text can be tolerably well restored it will prove most valuable. Among the writers cited are Euryphon of Cnidus, Herodicus, Hippocrates, Timotheus of Metapontum, Philolaus of Croton, Polybius and Menicrates, Dexippus of Cos, Petron and Philistion, and Alcamenes. In quoting from some of these writers the author tells us he obtained their extracts from a work of Aristotle. Mr. Kenyon suggests this was not an authentic work of that philosopher, but the one cited by Galen, as bearing his name, which was really written by his disciple Menon, and thinks it probable that much of this papyrus text is derived from Menon's work. These quotations appear to cease with authors of the fourth century B.C., and then the more original part of the work is taken up. Unfortunately, just here the writing is very defective, but it can

be gathered that much importance is attached to an explanation of the rival views of Herophilus and Erasistratus. The latest author quoted is Alexander Philalethes, who flourished towards the termination of the first century B.C., and the omission of all reference to Galen would seem to show that the recovered treatise was written originally before his time, though this papyrus may be a later edition. It is to be hoped that some of the medical societies may undertake to assist a competent scholar to edit this work, the funds of the British Museum being more properly applied to the acquisition than the publication of such treasures.—*Lancet.*

FATAL RESULT OF WATER DRINKING.—An old way of poisoning criminals used to be to compel them to swallow large quantities of bull's blood, and it is interesting to note how this acted as a means of causing death. Bull's blood is not a poison at all in the ordinary sense of the word, but when it enters the stomach it forms a coagulum, and, instead of the organ being filled with a liquid which might be ejected by vomiting, it is filled with a solid mass. This mass presses upwards upon the heart and displaces it. The pressure upwards upon the lungs interferes with the respiration, and the pressure backwards upon the aorta, vena cava, and the solar plexus would probably be sufficient to cause death. The same thing occurs in animals when they are first turned out among the clover; they over-eat themselves and are very likely to die from over-distension. A case was recently reported in the newspapers of an Irishman who had eaten largely of potatoes and milk and who died suddenly. The *post mortem* examination revealed no disease. He was apparently healthy, except that his stomach was distended, and no doubt he died in exactly the same way as the criminals who were compelled to drink bull's blood. Generally death cannot be brought about by the simple drinking of fluids, because the stomach is able to eject them. Apparently, however, this is not always the case. In one of the lay papers, a few days ago, there was a notice of three Frenchmen who laid a wager as to who would drink the most water, and all three of them died in a comparatively short time. The death in this case might have been partly due to the distension of the stomach and partly to the effect of the water on the blood after its absorption. It very rarely happens in a healthy person that enough water can be absorbed to cause any alteration in the blood, because it is excreted as rapidly as it is absorbed and the composition of the blood is kept nearly constant. Death from the action of water on the blood may occur after profuse hemorrhage when thirst is extremely urgent. This has been noticed in the battlefield and also in the case of women who have been nearly drained of blood by hemorrhage. In these cases it is always advisable not to give pure water to quench the thirst, for it is not only an irritant to living tissue, but it is also destructive to the blood. The risk of injury is considerably lessened by adding a little salt to the water, making it of the strength of the physiological normal saline solution.—*Lancet.*

THE RESTRAINT OF JUVENILE SMOKING.—It is time that the attention of all responsible persons should be seriously directed to the prevalence and increase of tobacco smoking among boys. Here and there, as we have recently shown,* there have been observed expressions of a strong repugnance existing in the public mind against this form of juvenile perversity; but we still lack the support of a general and outspoken objection to its continuance. At the same time, we feel assured that no man who has really given any thought to the matter would hesitate in condemning the injurious folly of this practice. Stunted growth, impaired digestion, palpitation, and the other evidences of nerve exhaustion and irritability have again and again impressed a lesson of abstinence which has hitherto been far too little regarded. A further stage of warning has been reached in a case which lately came before the coroner for Liverpool. A lad was in the habit of smoking cigarettes and cigar ends, and after an attack of sickness died somewhat suddenly. The *post mortem* examination revealed fatty changes in the heart, which there was little doubt, as the verdict held, had been fatally supplemented in their influence by the smoking habit referred to. This of course is an extreme example. It is also, however, after all,

*The Lancet, May 14th.

only the strongly colored illustration of effects upon health which are daily realized in thousands of instances. Not even in manhood is the pipe or cigar invariably safe. Much less can it be so regarded when it ministers to the unbounded whims and cravings of every heedless urchin. Clearly there is need of some controlling power here. The parent in certain classes is almost as ignorant of consequences and probably often quite as apathetic as his boy. Where he can be roused to the active exercise of his authority in repression, he should be. In very many cases he cannot, and we have therefore no hesitation in asserting once more our conviction that it is incumbent upon the legislature, in view of its known pernicious effect upon mind and body during boyhood, to restrict this habit by an age limit which will fall outside this period.—*Lancet.*

THE NEW RIFLE BULLETS.—Professor von Bardeleben has been studying the effects of the rifle bullets used in modern rifles. The new projectile has an inner core of lead, but this is inclosed in a casing of steel, which prevents the lead, even when softened by conversion of motion into heat, from becoming deformed and enlarged at the point of contact with the wound. This change is of much interest for military surgery. The weight of the new 8 millimetre projectile is much less than that of any of the old bullets. It is to its higher rate of velocity and pointed shape that its greater perforating power must be ascribed. Owing to the immense velocity it preserves in its flight, and its small surface of contact, it meets with little resistance on striking a person, causes little commotion of the neighboring parts, has no time to stretch the various tissues it encounters, and merely punches a hole, carrying the contused elements before it clean out of the wound, without seriously damaging the surrounding wall of the tract. The wound is thus left in a fit state for healing by first intention, as no contused parts remain for removal by sloughing. But on the battlefield this absence of contusion, which frequently stayed the bleeding of injured vessels, must lead to more frequent deaths from hemorrhage. Again, in former wars bullets which had been fired from great distances were found to strike the chest or other parts of the body, perhaps to break a bone, and then to glance off or rebound without penetrating farther. This is now impossible; a projectile coming from enormous distances, if it wounds at all, has sufficient power to pass through, cutting any vessels or organs it may meet in its way. Colonel Boonen-Rivera, reporting on the civil war in Chili, where he held the post of brigade commander, says that the number of dead on the battlefield was many times—according to his observation four times—larger than that of the wounded. This is the only war in which the new Mannlicher rifles with steel-covered projectiles have been used.—*Med. Record.*

THE
Canadian Practitioner
A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

When a change of address occurs please promptly notify the Publishers, THE J. E. BRYANT COMPANY *(Limited), 58 Bay Street.*

TORONTO, AUGUST 1, 1892.

THE COUNCIL AND THE MEDICAL DEFENCE ASSOCIATION.

In our issue of July 1st we referred to the fact that the Ontario Medical Council had appointed a committee to confer with the supporters of Dr. Meacham's "bill" with reference to proposed amendments to the Medical Act. Let us hope that such a conference may accomplish what is desired, *i.e.*, "a restoration of the feeling of harmony that had existed . . . and should continue to do so, between the profession and their representatives in the Medical Council." We believe that many members, if not the majority of the Council, recognize the fact that it is absolutely necessary to make some concessions, and agree to certain changes. The Defence Association is strong, and is growing stronger. It is well that this should be distinctly understood and properly appreciated. We have taken considerable pains to ascertain the views of the profession in the prov-

ince, and are convinced that a large proportion are in favor of some radical changes.

(1) There must be a redistribution of some sort. The general profession must have the controlling voice in the Council's deliberations. This might be done by diminishing or abolishing school representation, by diminishing university representation, and by diminishing the homœopathic representation.

(2) The vested rights of practitioners who received practically unconditional licenses to practise medicine in perpetuity must receive consideration. Any legislation, retroactive in character, which interferes with vested rights comes close to the border land of tyranny, and is always apt to be dangerous.

Other matters of minor importance will have to be considered. Much has been said about real estate speculating and gambling. Just criticism is allowable, but we hope no efforts will be made to impugn the honor or honesty of the men who certainly thought they were working in the interests of the profession in erecting a substantial building for the Council. The question of an annual assessment is a somewhat knotty one. There might be a large reduction in expenses if the number of representatives were cut down in the way we have indicated. Economy might reduce expenses in other directions. It might be possible to reduce or abolish the fee after this year. We will not attempt to go into details, but may simply say that strict economy will be urgently demanded. We hope that one of the results of the agitation will be that the members of the profession throughout the province will take greater interest in the election of their territorial representatives in the future than they have in the past.

STERILIZED MILK FOR INFANTS.

It has become quite the fashion in many parts of the world to extol the merits of sterilized milk as a food for young infants. The experience of those who have used it during the last two years has not, however, been entirely satisfactory. In fact, many who have given it a thorough trial have ceased to use it. The subject has been carefully investigated by such men as Hirst, Davis, Leeds, Conn, and others. The *Medical News* refers especially to the results obtained by Dr. Edward P. Davis, who made an exhaustive study of the effects of the use of sterilized milk. The results at first appeared to be good, but after a time serious disorders supervened, emaciation set in, grave intestinal troubles followed, and, finally, death ensued from non-nutrition.

These evil results are due to the changes which take place from the heating of the milk which is necessary for sterilization. The soluble albumen is converted into an insoluble modification which is difficult to digest. Other changes take place, but are not so important as the one referred to. As a matter of fact, cows' milk should not contain bacteria; but, as it is given to the consumer by the milkman, it frequently does, and much evil results therefrom. The proper way to avoid such contamination is to observe strict cleanliness in handling the milk.

According to the *News*, Leeds and Conn recommend that "market milk should be Pasteurized, and not sterilized. Instead of heating to 212°, the temperature of milk during Pasteurization is brought only to 155° F. At this temperature the bacilli themselves are mainly, if not quite, destroyed; and whilst the spores of the bacilli are more resistant and require the higher temperature for their destruction, the period of their development is delayed. Market milk, after Pasteurization, keeps fresh and sweet for 36 to 48 hours longer than the same milk as at present handled. Most forms of disease germs also perish after this treatment. As for those that are not killed, it is wiser to risk the remote contingency of their being present than to convert all the milk into an unnatural product in order to get rid of them." The problem of insuring a good quality of milk to all our towns, large and small, is a very important one, and worthy of all the careful study which it is now receiving.

UNIVERSITY REPRESENTATION IN THE MEDICAL COUNCIL.

We regret that a number of practitioners in Ontario hold extreme views with reference to university representation in the Medical Council. They will not be satisfied with anything less than the complete abolition of such representation. We think the universities are likely

to select men who would be of great service, especially in matters pertaining to the curriculum. If the representation were fairly balanced, and the territories had anything like their proper proportion of members, the universities would be unable, under any circumstances, to hurt the profession.

Take, for instance, the University of Toronto. Is it likely that a representative from that institution will do any injury to our great body of practitioners, or the cause of higher medical education? We think it improbable that many will answer, Yes. The records of the other working universities (and only such should be considered in this connection) show that their aim is to assist in raising the standard and the status of things medical.

However, apart from such considerations, the universities have still a stronger argument in reserve. They claim vested rights which cannot be ignored. When the College of Physicians and Surgeons was organized, they gave up their licensing powers with the distinct understanding that in consequence thereof they would have representation in that body.

FUNERAL REFORMS.

Much has been written in recent years about the dangers of standing bareheaded at funerals. The London *Lancet* states that the fashion is losing ground. It is supposed that exposure of this kind caused the death of the Duke of Clarence. Many other cases are reported where fatal results followed from the same cause. These sad lessons are said to have produced a good effect in England, and, as a consequence, the funeral customs are changing. The *Lancet* editorial aptly says that the evils are not confined to the winter months, but exist also in summer, when it is dangerous to expose the bared head to a broiling sun.

Such dangers are even more potent in our climate, with its greater extremes of heat and cold, and are probably more fully appreciated, especially in our larger cities, than they were a few years ago. We fear, however, that reform in our funeral habits is not making very rapid progress, and that many valuable lives are sacrificed through needless exposure during the burial service.

SUBSTITUTION BY DRUGGISTS.

We publish in this issue an article (Dr. Aulde, in the *Journal of the American Medical Association*) which discusses the evils attendant upon substitution and sophistication of remedial agents by druggists. Whether we have much of this sort of thing in Toronto we know not, but we certainly have a certain amount of it.

We have received a communication from the Drivet Manufacturing Company to the effect that some physicians in Canada find it almost impossible to procure Marchand's peroxide of hydrogen, inasmuch as a commercial article, sold in bulk at a low price, is supplied when the "Marchand" is prescribed. Conduct such as this is a base fraud on the manufacturer, the physician, and the patient. We hope the profession will put forth strenuous efforts to stop such iniquitous proceedings.

Meeting of Medical Societies.

PATHOLOGICAL SOCIETY OF TORONTO.

Annual meeting, May 28th, 1892.

The society met in the Biological Department, the president, Dr. J. E. Graham, in the chair.

Dr. Wishart presented the following specimen and gave the following history:

CASE OF SYMPATHETIC NEUROSIS.

(Presentation of irritating eye, by Dr. Wishart): Mrs. H., æt. 55, referred by Dr. O'Reilly, Fergus. Right eye blind as long as she could remember. No pain or trouble till February, 1892, when pain set in around and in right eye very violently, only relieved by morphia. This attack lasted from two to four days, and returned frequently. Left eyesight began to fail, and darting pains were felt in it from time to time. Both eyes became tender to the touch. On examination, right eyeball was shrunken. T + 2, pupil immobile anterior inferior synechia, and cornea opaque in lower half. No pain on pressure. Large scar seen in sclera about 4 mm. from corneal margin in upper and outer quadrant. L.E.V. $\frac{2}{100}$. Scleral vessels enlarged. Anterior media clear. Slight tenderness in

ciliary region. Fundus arteries small. Floating opacities in vitreous.

Removal of the irritating eye gave complete relief from pain, and improved vision in left eye. The eyeball was shrunken, and showed clearly the scar of the penetrating wound on being opened. The degeneration was very extensive. Sections were being prepared.

Dr. Wishart said there had been an injury over fifty years previously, and the case was interesting in view of the great lapse of time between the injury and the onset of irritation. The symptoms were plainly those of irritation, as the results of enucleation proved.

If we accepted ophthalmitis sympathetica and sympathetic irritation as the same disease, the second being the precursor of the first, which is the theory held by Carmalt in the article in the "Reference Handbook," then this was a case where the irritation could not possibly have been due to other than reflex action. If there were really two affections, then this was a sympathetic neurosis.

Dr. Graham asked if there was any satisfactory explanation of the secondary degeneration and ophthalmia in such cases.

Dr. John Caven asked if there were any other parts where inflammation was set up by nerve irritation. It was said that asthma was sometimes caused by nasal trouble, but he did not think the two cases parallel.

Dr. Primrose thought the inflammation might travel up one optic nerve to the chiasma and along the other, and the ciliary region was more likely to be affected on account of its greater vascularity.

Dr. Wishart replied that when the injury was in the ciliary region, the irritation was transmitted along the ciliary sympathetic nerves to the other eye, and remarked that although the question had not been definitely settled by *post mortem* examination, yet it had been pretty conclusively proved that the inflammation did not travel along the optic nerve.

In connection with this, several members spoke on the manner of the production of optic neuritis in cases of cerebral tumors and other brain lesions, some holding that it was due to increase of intracranial pressure; others, that it was caused by the inflammatory process extending along the meninges.

FATTY HEART FROM CASE OF ACUTE PERNICIOUS ANÆMIA.

Dr. Graham reported a case of fatty heart in pernicious anæmia. The interesting point in connection with this case was the occurrence of a mitral systolic together with a diastolic and presystolic murmur, the latter two being present at different times.

On *post mortem* examination the typical fatty heart of pernicious anæmia was found, but the mitral valve was in a fairly healthy condition. There was incompetence, owing to the dilatation of the heart, but no narrowing or thickening of the valves. They were free from atheromatous change as well. Some distinguished authorities assert that a presystolic murmur is a sure indication of a contracted mitral orifice. That opinion was certainly not borne out in the present case.

GENERAL TUBERCULOSIS.

Dr. J. Caver. presented the heart, lungs, and liver, with microscopic sections, from a case of general miliary tuberculosis.

Dr. Graham had seen this patient some time before death. He was very much emaciated, of a dark-yellowish complexion; had dyspepsia; liver was enlarged; marked dullness over lower part of right lung, and fine crepitation over the whole of the lower part of the right chest. The temperature chart was characteristic either of general tuberculosis or pyæmia. No tubercle bacilli had been found in the sputa. His diagnosis was that of some suppuration about the liver.

Dr. Acheson asked if it was not the rule that, in acute miliary tuberculosis, tubercle bacilli were not to be found in the sputa.

Dr. J. Caven said they were very rarely found.

SPINAL CORD FROM ACUTE SPINAL PARALYSIS.

Dr. Graham reported a case of acute poliomyelitis in which death took place from involvement of the medulla after four days' illness.

Specimens of the spinal cord prepared by Dr. Barnhart were exhibited. The capillaries in the gray matter were distended with blood corpuscles. Small extravasations were found in the anterior horns, and some destruction of nerve cells in the same situation. The changes were most marked in the cervical and lumbar regions.

TUMOR OF SPINAL COLUMN.

Dr. Graham presented microscopic sections of the tumor described by him at the last meeting.

CARD SPECIMENS.

(1) By Dr. Wishart: Larynx, trachea, and lungs, from case of diphtheria.

(2) By Dr. Thistle: Cerebral tumor. Microscopic sections.

(3) By Dr. Peters: Tubercular knee-joint.

The following officers were elected for the ensuing year: President, Dr. A. McPhedran; Vice-President, Dr. I. H. Cameron; Council: Drs. A. B. Macallum, G. A. Peters, and J. Caven.

The society then adjourned.

Correspondence.

Editor of THE CANADIAN PRACTITIONER:

DEAR SIR,—I sent you yesterday a *British Whig*, containing the standing advertisement of this man Bessey. During the afternoon two copies of the accompanying dodger were left in my office by a bill boy who, with an armful of them, was distributing them throughout the town:

"Visiting Kingston! Radical cure of rupture, piles, rectal diseases, womb diseases, urinary and sexual troubles, chronic and nervous affections, stomach and intestinal disorders, including dyspepsia and chronic constipation, and chronic diarrhœa, by an entirely new and painless method of treatment. Dr. Bessey, surgeon and specialist, of Toronto, is here for two days only, Friday and Saturday. May be consulted at City Hotel. Will visit Kingston every fourth week for two days. Next visit, Friday and Saturday, August 12th and 13th."

This is the second time I have been treated to this sort of thing, and I suppose that for the future my information regarding "Dr. Bessey's" performances and movements will not be neglected. As you will learn from the *Whig* I sent you, justice, though tardy, yet got on the track of the advertising frauds who had rioted on the people's ignorance here for between three and four months, and compelled them to seek other spheres of action without delay, so we hope that proper attention will at last be drawn to this gentleman, and will quietly yet firmly request him to follow a line of professional conduct or cease to call himself "doctor."

I am sorry that you have not room enough to print the cards of these medical tramps, who seem to be very numerous, for it is only by bringing this abuse constantly to the eyes of the profession in Ontario, and especially of the Council, that a suppression of this practice of advertising can be looked for. The Government of the province, left to itself, cares nothing about it; one or two medical men in any town do not wish to make themselves conspicuous at home by turning informers or prosecutors, however just their cause may be; the Council seems somewhat apathetic in this matter; and, hence, only by a general exposition of the evils and a diffusion of a knowledge thereof amongst the whole profession can a united action that will result in a thorough reformation be expected.

If you can insert this circular, please do so, and let the numerous readers of THE CANADIAN PRACTITIONER learn the state of affairs medical in Kingston, that each may compare it for better or for worse with that in his own locality.

Thanking you for past favors, I remain, as ever,

Yours truly,

THOS. R. DUPUIS.

DEAR SIR,—It is rather amusing to the practitioners of Kingston to see Dr. Dupuis posing as a defender of the profession against quacks and their advertisements.

The following sample of his own advertising among many which have appeared lately in the Kingston *Whig*, will give an idea of how some of our profession seek notoriety. Perhaps this is what he means by the closing paragraph: "The following are not the only advertisements that fill the newspapers":

"On Tuesday the difficult operation of trachelorraphy was performed on a lady living in the western end of the city. Dr. Dupuis did the work, assisted by Drs. Campbell, Chown, and Bell. The patient is doing well."

Yours,

M.D.

Book Reviews.

Transactions of the Southern Surgical and Gynecological Association. Vol. IV. Held at Richmond, Virginia, Nov., 1891.

This young and vigorous society continues to do good work. Our readers will remember that we published a short report of this meeting, written by Dr. James F. W. Ross, in December last, and also the able address of Dr. Louis S. McMurtry, of Louisville, Ky., the distinguished president of the association—his subject being, "A Plea for Progressive Surgery." The success of the association is largely due to the untiring zeal and great executive ability of the secretary, Dr. W. E. B. Davis, of Rome, Ga. This volume is a credit to the society, the secretary, and the printer. Among the papers especially worthy of note, in addition to the president's address, before referred to, are one on "Complications in Pelvic and Abdominal Surgery," by Dr. Jos. Price, of Philadelphia; "A Medico-Legal Aspect of Pelvic Inflammation," by Dr. W. W. Potter, of Buffalo; "Hand Disinfection," by Dr. Howard Kelly, of Johns Hopkins, Baltimore; "The Pedicle in Hysterectomy," by Dr. J. S. Stone, of Washington; "Injury to the Pelvic Floor," by Dr. T. A. Emmett, of New York; "The Growth of Fibroid Tumors of the Uterus after the Menopause," by Dr. J. Taber Johnson, of Washington; "The Surgical Treatment of Anterior Displacements of the Uterus," by Dr. Charles A. L. Reid, of Cincinnati; "Thinness of the Uterine Wall during Pregnancy Simulating Extra-Uterine Fœtation," by Dr. Geo. J. Engelmann, of St. Louis; "The Removal of Necrotic and Carious Bone with Hydrochloric Acid and Pepsin," by Dr. Robert T. Morris, of New York; "Some Complications of Psoas Abscess," by Dr. J. McFadden Gaston, of Atlanta, Ga.; "The New Field in Abdominal Hysterectomy," by Dr. James F. W. Ross, of Toronto; "Acute Oophoritis Complicating Pregnancy," by Dr. Henry C. Coe, of New York; "A Case of Cholecystotomy for Stones in the Gall-Bladder and Cystic Duct, with Remarks on Gall-Stones," by Dr. W. E. B. Davis, of Rome, Ga.; and seventeen others. A full report of the various discussions is also given.

The Science and Art of Midwifery. By William Thompson Lusk, A.M., M.D., Professor of Obstetrics and the Diseases of Women and Children in the Bellevue Hospital Medical College, etc. New edition, revised and enlarged, with numerous illustrations. New York: D. Appleton & Co., 1892. Pp. xviii.-761. Toronto: J. A. Carveth & Co.

This is an admirable work, well suited to the student and practitioner. Dr. Lusk is well known as an able, conscientious, and conservative worker in midwifery. He keeps thoroughly abreast of the times, and shows good judgment in choosing the best among new things, and throwing out the chaff. We have noticed that each edition after the first was an improvement on the preceding one. The fourth edition is certainly the best of the lot; and a comparison of it with its predecessor shows that a vast amount of labor has been expended, many changes have been made, and much new matter has been added.

Therapeutic Notes.

SULPHUR IN CHLOROSIS.—In the June number of the *Practitioner* we find an abstract of a paper by Professor Schulz, published in the *Berliner klinische Wochenschrift*, No. 13, 1892, in which he again draws attention to the value of sulphur in certain cases of anæmia. After alluding to the prominent part played by sulphur in the life of the cell—a part analogous to that of hæmoglobin in the blood—and to the excellent results obtained by the use of sulphur waters in malarial cachexia, he comes to these conclusions: (1) In cases of pure chlorosis in which iron proves inefficient, the general condition is decidedly improved by sulphur; (2) after the administration of sulphur has gone on for some time, treatment with iron can be commenced and continued with success; (3) in cases of chlorosis complicated with catarrhal and inflammatory conditions of the digestive tract, sulphur is not borne. Schulz relates a case illustrating the advantage of the sulphur treatment. The patient, a woman, thirty-four years of age, showed an extreme degree of anæmia, and had loud cardiac bruits. She complained of headache, giddiness, shortness of breath, palpitation, and complete loss of appetite, with pain in the epigastrium after food.

Rest in bed with bland fluid diet was ordered, and this, with bismuth and morphine and occasional doses of Carlsbad salt, relieved the pain. Iron was tried in the form of the saccharated carbonate, but vomiting immediately set in, and its use had to be discontinued. Other preparations of iron were tried with no better result. Sulphur was accordingly given, and this she bore very well. Great improvement ensued; the anæmic appearance lessened, and the headaches and palpitation disappeared. She was discharged from hospital greatly bettered; but she still complained of some palpitation on considerable exertion. Iron was again given as the saccharated carbonate, and this time was tolerated without difficulty. The sulphur was used in the form of flowers of sulphur mixed with sugar of milk, as much being taken three times a day as would lie on the point of a knife.—*New York Med. Jour.*

PHYSOSTIGMA IN HICCOUGH.—Dr. Shallengberger, of Rochester, Pa., writes: "In a recent issue of the *Edinburgh Medical Journal*, Mr. Smart calls attention to a case of obstinate hiccough from chronic alcoholism, so persistent as to prevent sleep and the ingestion of food. No relief followed the use of any drug except from the administration of dangerously large doses of morphine, persisted in for six days. My object in this note is to assure the profession of the value of physostigma in these cases of obstinate hiccough, from whatever cause. The cases that I have seen have yielded to its influence within two or three days. The last case was precisely like the one reported by Mr. Smart, and forty-eight hours' use of this drug settled the hiccough. Another case of hysterical hiccough, of three months' duration, that had resisted all other agents, was speedily controlled in the same way. A good fluid extract was the form given. The dose is four to eight drops every two or three hours, pushed to the point of causing toxic symptoms."—*Med. Record.*

IN Germany a lecture on homœopathic medicine is added to the curriculum of the regular schools, and in that country the distinctive school of homœopathy is as thoroughly done away with as could be wished. The latest statistics give only thirty-seven homœopathic practitioners in the whole of Germany.

Miscellaneous.

HEALTH OFFICERS' ANNUAL MEETING.—The seventh annual meeting of the Association of Executive Health Officers will be held at Niagara Falls Town on August 16th, 17th, and 18th. Among the papers which will be read are the following: "Organic matter in its relation to Asiatic cholera, cholera nostras, and other diseases," by Allan Cameron, M.D., medical health officer, Owen Sound; "The causation and prevention of typhoid fever, and the duty of municipalities in relation thereto," by John Herald, M.D., chairman Board of Health, Kingston; "A sporadic outbreak of diphtheria, caused by an open sewer," by Alan Macdougall, C.E., consulting engineer, Toronto; president's annual address, by Charles McLellan, M.D., Trenton; address by Hon. Richard Harcourt, M.P.P.; "Methods of sanitary work in Brantford," by Egerton Griffin, M.D., medical health officer, Brantford; "The disposal of Toronto sewage," by J. J. Cassidy, M.D., Toronto, chairman Provincial Board of Health; "Regarding the proper methods of sewage filtration," by E. H. Ball, C.E., Toronto, chief sanitary engineer of Medical Health Department; "The best means for disposing of city sewage and garbage," by J. D. Macdonald, M.D., Hamilton, member Provincial Board of Health; "Pollution of Niagara River in relation to public water supplies," by Dr. Oliver, Niagara Falls; "Air of public assembly rooms and its examination," by A. McGill, M.A., Ottawa, analyst, Inland Revenue Department; "Isolation hospitals, their uses and methods," by Norman Allen, M.D., Toronto, medical health officer; "Some points relating to the artesian water supply of Chatham," by R. Hall, M.D., Chatham, medical health officer; "Vital statistics in their relations to public health work," by P. H. Bryce, M.A., M.D., Toronto; "The practical advantages of having medical health officers for counties and districts," by Francis Rae, M.D., Oshawa, member Provincial Board of Health; "The factors necessary to a practical diagnosis of tuberculosis in cattle," by J. J. Mackenzie, M.A., laboratory of Provincial Board of Health, Toronto.

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ELECTROLYSIS IN PRACTICE.*

BY CHARLES R. DICKSON, M.D.,
Electro-Therapeutist to Toronto General Hospital and Victoria Hospital for Sick Children, Toronto.

This is a subject which is claiming much attention from the medical profession at the present time. Heretofore we have been rather slow to accord proper recognition to electricity as a remedial agent, and there have been many good reasons for this; among others, the haphazard fashion in which it has been employed by regular practitioners, on the one hand, and the mysticism with which charlatans have sought to surround it, on the other hand; but, happily, all this is rapidly being changed, and now that we possess instruments of precision to regulate the dosage, and understand the laws that govern this force, much good work is being done, and yet we are only upon the threshold.

It will be impossible, in the time at our disposal, to consider the early history of electricity, or discuss the various theories that have been propounded from time to time to explain its manifestations in nature, or in its applied forms in the arts, science, or medicine. It will likewise be impossible to enumerate all the diseases in which it may be used with more or less benefit. The object of this paper is to take up a few of the applications of electrolysis which are of interest to the general practitioner.

*Read before the Huron Medical Association at Seaforth, July 19th, 1892.

In an article written a few years ago, I said: "Electricity is not the simple, harmless panacea that many of its advocates would have us believe, but, on the contrary, requires in its successful application rare tact, judgment, and skill, combined with a mature acquaintance with all its fundamental laws, such as is to be gained only by plodding, earnest, patient study of it in all its forms, and by experiment in which common sense and physiology have a hearing"; and I have seen no reason since to modify my views. I can very readily understand why electricity is almost invariably successful when employed by some, while in the hands of otherwise skilful men it proves a most lamentable failure, frequently doing great damage.

Electricity is one of the forces of nature, a form of motion among the molecules of matter, choosing for its path the best conductor and most direct course available. When this course is organic tissue, and the force sufficient, decomposition of the salts of the tissue takes place. Tissue thus acted upon is termed an "electrolyte," and the process "electrolysis." Around the positive pole, at which the current enters the tissue, oxygen gas and the acid portion of the salts collect, while at the negative pole, by which the current leaves the tissue, hydrogen and the base or alkaline portion of the salts are found; thus, in electrolysis of muscle, sulphuric, nitric, phosphoric, and hydrochloric acids develop at the positive, while soda, potassa, and ammonia gather at the negative pole. This is a crude and very incomplete description of what

takes place, but it will serve the purpose of helping to a better understanding of the different actions of the two poles.

And now as to instruments required. First, a good galvanic battery. The ordinary 24-cell zinc and carbon element portable battery, if well constructed, will prove adequate to the treatment of the general run of cases, and if well taken care of will not disappoint one. It should be provided with means of gradually increasing and decreasing the strength of the current without interrupting it. Next we require a current measure or milliampere-meter, which should have divisions of one-fifth of a milliampere, and should record up to at least two hundred and fifty. This instrument has revolutionized electrical practice by systematizing it. From it we tell if the current is passing at all, whether it is passing steadily, in which direction it is passing, and how strong it is. Flexible conducting wires, covered with some insulating material, are necessary; with them a pole of the battery is connected with the meter, and this in its turn to an electrode, while a third connects the other pole to a second electrode. The armamentarium is completed by electrodes of various sizes, shapes, and materials, a couple of insulated handles into which some of the electrodes fasten, a few binding screws, and some insulated copper wire, such as magnet wire, for emergencies. For electrodes for general use we require a small circular and a larger oblong one of brass, zinc, aluminum, or other metal, or of carbon. Convenient sizes are an inch and a half in diameter for the former, and five and a half by eight inches for the latter, which should be flexible also. They are generally covered with sponge, or absorbent cotton, which should always be thoroughly moistened with hot water before applying. To increase the conductivity a little ordinary salt may be added to the water; but when the electrode is to play the part of the positive pole, the substitution of carbonate of soda will prove more acceptable to the patient. These electrodes are used to complete the circuit; the active electrodes will be described as the occasion for their use arises.

Having collected our apparatus, the battery being charged with the proper bichromate fluid, the first step should be to ascertain if all is in good working order; there are several ways of testing this, the simplest being to make the connections as described, immerse the elements in the fluid, but, instead of attaching the wires to the electrodes, dip the ends in a bowl of water to which a little salt has been added, keeping them three or four inches apart, turn on the current gradually, and note if the meter shows a gradual and steady increase. To determine the polarity, the quickest way, and one that is always at hand, is to dip the ends of the wires in the water as before, and turn on the current; the pole at which the bubbles of gas collect most freely is the negative.

A simple experiment, from which we may learn much, is quite in place here. Plunge two platinum wires, connected with the respective poles of a galvanic battery, into a piece of fresh pork, allow the current to pass for a couple of minutes, and note the result. At one pole bubbles collect in much smaller numbers, for the water of the tissue contains only half as much oxygen as hydrogen, and it is the former we note. Apply a piece of litmus paper to the seat of puncture and it is at once reddened, showing the presence of acid. We have here oxygen and acid, hence it is the positive pole. At the other pole hydrogen is given off quite freely, and on applying the reddened litmus to this puncture its color is restored, showing the alkaline reaction at the negative pole. At each puncture is plainly visible an areola showing the zone of decomposition. Both wires are removed without difficulty. Repeat the experiment, using steel needles. At the positive pole no bubbles are given off at first, for the oxygen has combined with the metal to form an oxide of iron, which pigments the surrounding tissue; later on, when the needle is well encrusted with the oxide, bubbles of oxygen are visible. This needle is withdrawn with some difficulty on account of the encrustation and coagulation which has taken place about it, while the negative needle is withdrawn without trouble.

The same process takes place to a more marked extent in living tissue. The clot at a positive puncture is firm, and due to coagulation by the acids; the clot at the negative is soft, and due to the froth of the hydrogen bubbles. The tissue surrounding the positive puncture is drier than that at the negative, due partly to electro-osmosis, or transportation of fluids from

the positive towards the negative pole. The resultant cicatrices also differ, that at the positive puncture being firm, hard, retracted, leaving often a permanent deformity; it also shows much fibrous tissue and amorphous matter, while the negative is soft, pliable, non-adherent to subjacent tissue, not retracted, and will gradually become pale and generally fade away entirely.

In practice, the process of electrolysis is not always carried to the extent of causing destruction of tissue. With mild currents absorption is promoted by electro-osmosis, with stronger we decompose, while with still stronger destruction, and even sloughing, may take place.

With this rather imperfect description of the process before us, we will be in a better position to understand its application in practice.

Dr. Robert Newman has said that "the art in applying electrolysis successfully in surgery consists in:

(1) "Using the correct strength of the electric current.

(2) "Applying the respective poles in the right place.

(3) "Selecting the size, shape, and material of the electrode.

(4) "Regulating the duration and intervals of seances." To which we may add:

(5) The selection of suitable cases.

When electrolysis is mentioned nowadays, one's thoughts are very apt to turn to the gynecological field, for in this have its successes—and failures—been most marked recently.

In *uterine fibroids*, I have confined myself to the use of various intra-uterine sounds, for I have been rather too conservative to try galvano-puncture in these cases yet; but even in this way good results have been met with, notably, diminution of hemorrhage, lessening of pain, and the disagreeable pressure symptoms, reduction in the size of the tumor, or retarding of ts growth. This treatment is most applicable to the small interstitial variety, though it is frequently of benefit in quite large tumors. The positive electrode is usually a large flexible metal plate covered with sponge well wet with a solution of carbonate of soda in hot water, and placed low down over the abdomen. When the tumor is situated in the posterior portion of the uterus this electrode may with advantage be placed low down on the back, first protecting the spinal column by a strip of oiled silk or gutta percha tissue. Apostoli and others use an electrode of potter's clay covering a metal plate and contained in a porous cloth; when wet it is moulded to the shape of the abdomen, but it is dirty in application. The smaller the size of the external electrode, the greater the pain and burning from concentration of current; hence with the stronger currents our indifferent electrode must be large, or we shall blister the skin below it. The negative pole in these cases is a flexible metallic sound insulated to within an inch or an inch and a half from its tip, and this latter portion nickel-plated. It is introduced through the os, as high up into the uterine canal as it is possible to go, the current is slowly turned on till the meter shows about ten milliamperes; this is kept up for ten or fifteen minutes, the current then gradually turned off, the sound withdrawn, and the patient kept quiet for an hour or two. It is better to begin with low currents, for the susceptibility of patients varies very much, and the skin under the positive electrode can stand more at subsequent seances when this is done. In a couple of days, if the patient is none the worse for the treatment, a stronger current may be used, fifteen to twenty milliamperes for ten to fifteen minutes. At each seance the sound is introduced from an inch to an inch and a half lower down than at the previous seance, till all the endometrium has been acted on; then you start from the upper portion again. I prefer the milder currents at short intervals instead of the currents of two hundred to two hundred and fifty milliamperes so often mentioned, though I do not hesitate to use the latter when I consider it necessary. I rarely go above one hundred milliamperes. Treatment should be continued for several months before giving up a case as hopeless.

In *stenosis of the cervix* the same or a smaller negative electrode may be used with the greatest benefit, commencing with five milliamperes for fifteen or twenty minutes, and gradually using stronger currents till the condition yields.

In *menorrhagia* and *metrorrhagia* the polarity is reversed, the positive being internal; hence the former active electrode will not do, as we must have a non-oxidizable one. For this

reason platinum is generally chosen, but it is rather expensive, and the copper cores insulated and wound with platinum wire for a short distance from the tip have proved treacherous in my hands; hence I have had an aluminium one constructed with a hard rubber tip, then an acting portion of about two and a quarter inches, and the shank insulated with hard rubber tubing and fitted into a short brass rod, this screwing into the ordinary handle. If is not very readily oxidized, and can be kept clean without trouble. It is introduced to its full extent, and from ten to thirty milliamperes passed for ten to twenty minutes, always remembering to commence with low doses.

In *chronic cervical catarrh* this same method is often successful.

Passing from the genital organs of woman to those of man, *stricture of the urethra* has proved a most fertile field. The best results are from the treatment laid down by Newman, the positive electrode being used on the surface of the thigh, and the negative in the urethra. The latter are urethral sounds insulated up to the tip, which is an egg-shaped metallic bulb in the curved, and acorn-shaped in the straight set, and of various sizes. Having located the stricture and determined its calibre, an electrode three sizes larger (French scale) is introduced up to the stricture, pressed gently against it, and a current of two and a half to five milliamperes gradually turned on. In ten to twenty minutes the stricture will gradually yield and the bulbous tip pass through; the current is then turned off and the sound withdrawn. There should be no pain, no hemorrhage. In about ten days the patient is ready for another seance. A sound about two sizes larger is used, and so on till all the cicatricial tissue is removed by absorption. For tortuous strictures a filiform guide is first passed, then a tunnelled electrode threaded on to it and passed as before; in this way the formation of false passages is avoided. There are many rules to be observed, but they would be out of place in a paper intended for the general practitioner, and I earnestly advise all such to avoid trying experiments with this treatment. When a celebrated genito-urinary surgeon in New York admits his failure with this method, you can see it is not half as simple as it looks.

In *prostatitis*, very mild currents, with the negative inside, while the positive is on the perineum, one to three milliamperes for five to ten minutes may hasten resolution; but a safer plan is to use a negative ball electrode covered with absorbent in the rectum, with the positive over the perineum half the time, and above the symphysis pubis for the balance. Ten, fifteen, twenty, or twenty-five milliamperes passed for ten to twenty minutes have given good results.

Stricture of rectum and of *œsophagus* have derived benefit, but I have had very little experience with them.

Many affections of the skin and its appendages are in our field.

Hypertrichosis is a source of much annoyance with ladies. In this case the positive electrode is held in the hand of the patient, while the negative is a fine needle called by watchmakers a pivot broche; this is fastened in a handle which has a spring for making and breaking the circuit. There is little pain, but the parts may be smeared with a five per cent. oleate of cocaine. The hair to be acted on is seized by a pair of epilation forceps; the current from two to six cells or one to four milliamperes being previously turned on, the needle is thrust into the hair follicle, and to the bottom of it; contact is made, the bubbles of hydrogen escape around the needle, and in a very short time the hair is loosened and removed by the forceps after the needle is withdrawn. It is a mistake to attempt to remove too many hairs at one seance, or take them out closer than one-eighth of an inch apart at the same seance. The follicle should come away with the hair bulb. The parts may be bathed with boracic solution, and dry boracic dusted over lightly. If there is much irritation warm bathing, followed by vaseline or cold cream, will soon allay it. Treatment should not be repeated till all inflammation has subsided. If carefully done there should be no pitting.

Nævus, when superficial, may often be removed at one seance by insertion of the negative needle in the base, and transfixing the growth in every direction, one to three milliamperes usually being sufficient. With adults anæsthesia is not necessary, and they may hold the small positive electrode in their hand. With small children it is better to anæsthetize,

and the large electrode may be placed over the shoulders and the child allowed to lie on it. The larger and more deeply-seated nævi will require stronger currents and several treatments. The smaller nævi may be allowed to dry up and fall off after operation. An excellent dressing is flexible collodion, which may be tinted with carmine so as to form an almost imperceptible coating if the nævus is on the face.

Subcutaneous erectile tumors and *sebaceous cysts* yield readily to the negative puncture also. In all these cases the small gold needles are to be preferred, and should be insulated to within a short distance of the tip. In this way their action is not spread through the surrounding skin. Gold is chosen on account of its greater conductivity and flexibility.

In *malignant tumors* much may be expected of electrolysis, but here again the greatest care is required. In *epithelioma*, especially of the face, it possesses marked advantages over removal with the knife; namely, less tissue required to be removed, no hemorrhage, no stitches required, the surface left after the operation is in the best possible condition to prevent absorption of cancerous or septic material, and there is little resultant deformity, or none at all. I prefer to use a positive needle thrust into the tumor, and one or two negative through the sound tissue at its base and parallel to the positive, and a current of twenty or thirty milliamperes, the position of the negative needles being changed frequently till the growth comes away *en masse*. A simple carbolated dressing is all that is required.

Indurated glands require the negative puncture.

Goitre has been a rather prolific field with me. In all cases the oblong electrode is positive and placed behind the shoulders. At the site of puncture a hypodermic injection of from five to ten minims of a mixture of 5 per cent. cocaine and 6 per cent. antipyrin in distilled water is made. The growth is then steadied with the left hand and the patient directed to swallow several times, to aid in mapping out the boundaries. A steel needle negative, insulated to within a couple of inches, or less, of its tip, is introduced through the isthmus into the lobe which is most enlarged, and the current turned slowly on. We can start with ten milliamperes for ten minutes, and at future seances may go up to fifty or more, but this is rarely necessary. Subsequent punctures, as a rule, may be made through the first opening, the needle being thrust into different parts of the lobe, or into the other lobe when it is enlarged. Seances may be once a week, though when pressed for time they may be three times a week in some cases, but the former is preferable. The wound may be dressed with iodoform and boracic on alembroth gauze, retained by a narrow adhesive strip.

Cystic goitres are the most amenable to treatment. Use an aspirating needle insulated to within an inch of its tip, evacuate contents of cyst, reinject a solution of chloride of sodium to distension, connect needle with negative wire, and use a current of about thirty milliamperes for fifteen to twenty minutes; turn off current, empty sac, apply iodoform and boracic dressing, and compress with broad adhesive strip. Two or three applications will sometimes effect a cure.

In *hydrocele* a similar treatment has been successful.

I have not alluded to the use of electrolysis in the removal of exudations by absorption, the treatment of fistula in ano, or of fistulous tracts in other places, or of ulcers, yet in all these it is of the greatest value; and there are a great number of other disorders that it may be relied on to cure, if cure is possible. I should also like to have given the treatment more in detail, and introduce cases of cures, but the object is to instruct, not to weary.

In conclusion, let me say that our greatest successes with electrolysis will be found when we work along the lines of trying to assist nature, not to combat her. Watch her reactions carefully, then, and be guided by them as to what strength of current, and how long, and how often to use, and when not to use at all. In electricity we possess a most powerful agent for weal or for woe. That we have ignored it so long is not greatly to our credit as a progressive profession. The commercial world has not been so slow to recognize its value, and see what results! It has revolutionized, and is still revolutionizing. Let us, then, make amends for the past. Who knows but that it may revolutionize many of our own fields, and perchance remove some of the reproaches that rest on the noblest profession in this fair world?

CONSTIPATION.*

BY J. C. MITCHELL, M.D, ENNISKILLEN, ONT.

Mr. President and Gentlemen: Constipation is a subject with which we are all more or less familiar, and may be defined to be that condition in which there is a prolonged retention of the fæces, or in which they are habitually expelled with difficulty, or in insufficient quantity. While there are individual peculiarities due to habit or nature, the custom with most persons of having one movement in twenty-four hours would cause any longer retention of bowel contents to be considered constipation. There is no sharp line separating constipation from health. The habit of having one movement in each day is usually considered necessary for the continuance of good health, although both the number and the hours of evacuating are fixed to a great extent by education. The habit once established, the desire recurs at the same hour and entirely without any effort of the will. If the desire be resisted, as that moment may be urgent for some other direction of energy, it will not likely return until the same hour in the next day. By so much every time as this happens is the habit of defecation with ease less ened. Habits of life are as much formed by neglect as by practice. Children of both sexes, even at the present day, are not commonly taught that the most important hygienic duty of the day is to void the bowels. Men and women of the lower classes have no fixed rule of conduct in this respect. Habits come upon them—they do not seek to form them. It is only when we come to the really educated in any community that we find a due appreciation of the importance of a daily and copious defecation. Constipation is generally an acquired habit, and Shoemaker, of Philadelphia, says, "it is an inherited defect of civilization." He says: "This is readily seen if one goes from civilization to a life of mountains and woods, with plenty of mental and bodily employment, ravenous appetite and constant opportunity for immediate relief of the bowels. He will find that he will often have a natural passage twice in twenty-four hours instead of the single one which civilization has decreed as best for that space of time. There are not generally any restraining influences among the wilds. Time and place are propitious. Nature asserts herself without restraint and reverts to her ancient promptings and ways."

Constipation occurs most frequently in advanced life from the loss of peristaltic force, diminution of sensibility in lower bowel, general functional inactivity, with muscular degeneration and obesity. Infants are more subject to it than children over one year, especially those who have been brought up by hand. In those cases it is usually due to improper diet or unsuitable clothing, or both. Jacobi has drawn attention to the fact that in infants it is sometimes caused by a disproportionate length of the sigmoid flexure. If the infant is badly nourished the muscular contraction will soon begin to flag, and will be attended by actual weakness of the muscular walls, and in this condition the bowel is apt to be over-distended by the fæcal contents as the expulsive force is seriously impaired. A baby soon will know the suffering caused by a motion, and by its own efforts will delay relief. Very often, too, in infants the torpor of bowels is induced by some of the preparations of opium formerly so much in vogue, but happily going out of fashion to a certain extent.

Women are more prone to constipation than men. Avoidance of exercise, their habits of indoor life, ignorance of the necessity of regularity or wilful neglect, false modesty, which so often imposes restraint, together with their anatomical structure and physical life are the chief causes of this.

Habits of life and the occupation of the individual have much to do with the causation of constipation. Both persons of sedentary habits and overworked people are peculiarly subject to this trouble. Luxurious and enervating habits of life, bad ventilation, overheating of rooms, want of cleanliness, indigestible food, imperfect mastication, irregular meals, excessive tea-drinking, and tight-lacing all tend to bring it about. Neglect to establish a regular habit, as the continued contact of fæcal matter with the mucous membrane wears out its susceptibility, and over-distension enfeebles the muscular walls of the bowel; various diseases of the brain, lungs, heart, liver, and the disorders of the digestive system, abundant diaphoresis and diuresis, food

*Read before the Ontario Medical Association.

in concentrated form with too little waste to be gotten rid of, change from an active to a sedentary life are among common causes. Painful affections of rectum and anus, such as fissure and hemorrhoids, although commonly caused by constipation, greatly aggravate the trouble, as they deter from yielding to the desire for defecation.

The use of cathartics and aperients has always been and is now one of the most important factors in developing the constipated habit. The idea that a daily movement is a necessity, and that an occasional purgative is useful in relieving the system of morbid material which would otherwise induce disease, is the chief source of this hurtful custom. The term biliousness implied the resort to cathartics for its relief. We cannot but heartily accord with Dr. Johnson, in "Pepper's System of Medicine," that it was time that we as physicians discarded the term of biliousness, as more ignorant and erroneous treatment has hung upon that theory than upon any other doctrine of medicine of recent date. The amount of pills, cathartic nostrums, mineral waters, etc., consumed by the general public in self-medication is something enormous. At first the evil effects are not apparent, but in time the reflex function is not brought into activity except by the aid of either aperients, cathartics, or enemas.

Sometimes cumulative constipation is masked by a regularity of small stools or by diarrhœa, and great care is necessary in making a diagnosis, so that the patient should not be put on an astringent treatment. From whatever cause our constipation may come, we will have various degrees of atony right up to paralysis of the peripheral nerve-endings in intestines, and of centres in the cord. Atony may not only be in the unstriped muscles, but may affect the voluntary muscles as well.

Much of the importance attached to constipation depends upon the effects it produces. Undoubtedly a great many diseases are occasioned by the absorption of poisonous material from retained fæcal matter. The co-existence of constipation with mental irritability and melancholy is often remarked. Neighboring viscera suffer from overloaded bowels, and many of the uterine difficulties may be traced to this as a cause.

Although not agreeing with Wilfrid Hall, of New York, that all diseases are caused or aggravated by the absorption into the circulation of effete and poisonous material from retained fæces, and that, in order to maintain perfect health, we must at least every third day make the toilet of our colon and rectum by an internal application of at least three quarts of hot water, we do think this absorption a fruitful source of disease. Many anæmias, fevers, headaches, sore throats, neuralgias, chest, stomach and intestinal difficulties, hemorrhoids, fissures of the anus, etc., are often caused by this affection.

The physician can render great service by giving the patients advice which will prevent constipation in children. He should insist upon the importance of regularity in defecation; this is, if possible, even of greater moment in girls. The failure to teach and insist upon good habits in children in this respect is the cause of much of the trouble of after life. To persons leading sedentary lives, the importance of exercise should be pointed out. Comfortable water-closets should be provided. In the country this is one of our great difficulties, as the privies there are very often unsheltered, cold, exposed, and full of draughts, and a fertile source of constipation to delicate females. In fact, it is a rare thing to meet a lady patient in the winter season in the country who is not constipated. This is to be attributed in very many cases to the cold and uncomfortable privies. In the city, with your admirable system of waterworks, it is very different. We should be very glad if some ingenious mind could devise something as comfortable and cleanly for the country. After a stool occurs a few moments should be allowed to see if a further amount of fæcal matter finds its way into the rectum, as it should never be allowed to remain there to further blunt the sensibility of the mucous membrane, and so delay cure. Daily exercise, frequent sponging, and friction of surface of body, especially over abdomen, will be of much service. Active business men, especially young men, need emphatic teaching, as they are liable to disregard the simplest rules of health. Indigestion, as a precursor to constipation, should be carefully looked after and treated. Acute constipation in a previously healthy person does not call for very active treatment, and usually does best

with but little interference. If the bowels do not move in three days, a warm water enemata should be used, or, this failing, a compound aloe pill, a small dose of sal rochelle, or other similar mild laxatives.

In chronic constipation the physician should remember that it is not the symptoms, but the cause, to which he should direct his attention. It is often a symptom of some other disease. Its causes are so peculiar to the individual and depend upon so many variable habits of life that each case calls for special study. When we find the cause to be the habit of neglect, hurried eating, use of aperients, or whatever it may be, then we may consider the cure. The digestion is of great importance. If there is deficient secretion in either small or large bowels, it is apt to be associated with hepatic disturbance, and is marked by dull headache, bad taste, viscid secretions from buccal glands, etc. This condition is usually aggravated by cathartics, for although there is temporary improvement following temporary increase in secretions, there is corresponding decrease, and the patient is worse than before. Fruit, such as contain citric acid, as much as can be properly assimilated, serves a good purpose. An orange the first thing in the morning is often an excellent thing. Water is also a good remedy if taken freely in the morning. A slight saline may be added, as it increases its capability for absorption. A single grain of quinine will greatly add to its effect. If drugs are given, it should be those which aid intestinal digestion. The mineral waters are best suited to those cases dependent upon intestinal catarrh.

Deficient enervation, as found in old people and those of sedentary habits, is generally attended by deficient action of the skin and sallow complexion. In such cases water will be found to weaken digestive powers unless it can be combined with a different mode of life and an abundance of outdoor exercise. Cold bathing, plenty of exercise in the open air, electricity, massage, nux vomica, and belladonna will be helpful in keeping the rectum empty. Massage, for women, children, and feeble persons, will to some extent take the place of exercise.

The best diet for cases of atony of colon and rectum is one which is easily digested and contains a moderate amount of water. Porridge of oatmeal or cracked wheat, with coarse bread, should be part of the daily diet. Too much vegetable matter is harmful, as the bowel is filled with an excess of water. In addition to the drugs mentioned, iron, quinine, and strychnia are useful.

Very often we must resort to aperients, and then good results may be obtained from aloes, cascara sagrada, sulphur, pulv. glycyrrhizæ co., podophyllin, and salines in doses just sufficient to produce the result desired and no more. These drugs used in rotation will be of much greater service than the continued use of any one. The continued use of water enemas has not in my practice been very servicable in the treatment of this affection, as after a time the bowel fails to respond. Glycerine, owing to its hygroscopic action, has given me much better results, and I have used it quite freely either in enemata or in 90 per cent. suppositories. In many cases it has effected a cure. Like all the other remedies, it is difficult to get the patients to attend to it faithfully and to carry out the treatment thoroughly.

Cumulative constipation occurs more frequently than is commonly supposed, as the true condition is so often masked by deceptive symptoms. Many cases of diarrhœa are from an accumulation of fæcal matter in the colon, and for this reason do not yield to the usual remedies applied. All this class of cases, either in children or adults, can be readily treated by flushing the colon by injecting from one-half to a gallon of hot water. It acts promptly, and has less reaction than purgatives. It cannot do any great harm where the bowel has been so much distended with its load of filth. The colon must be thoroughly flushed by using a large quantity of water to make the treatment efficacious. Dr. Fields, in an article on this phase of constipation in the *Boston Medical and Surgical Journal* of November, 1889, advises in all cases twenty freshly prepared compound rhubarb pills, one to be taken every hour. He says: "In very bad cases this has made complete cures in twenty-four hours without any injurious reaction." Of course, whatever plan of treatment may be adopted at first, the after treatment must be carefully looked after.

Surgical treatment has been tried with good results in very obstinate cases of constipation.

Dr. Cleveland, in the *Medical Record* of March 9th, 1889, states that from observation of a number of cases where the sphincter ani has been stretched for fissure of the anus that the accompanying constipation had at the same time been cured. He gives a record of some ten intractable cases that resisted all ordinary treatment, but were entirely cured by a thorough stretching of the sphincter and careful attention afterwards. The theory of the effect of the operation is as follows: When fæcal matter passes from the colon into the rectum, there is aroused the conjoined muscular action to expel it. The action of the sphincter muscle is twofold: that of a barrier to involuntary movement, and an aid to expulsion of the fæces. The internal sphincter is merely an aggregation of intestinal muscular fibres, and the joint action of both sphincters in aiding the expulsion of the fæces is the same as the peristaltic movement of the bowels, only much more powerful. Where obstinate constipation of long standing exists the general condition is usually debilitated, and the rectum distended by hard, dry fæces. The sensibility of its nerves is blunted, and the contractile power of muscles so enfeebled that even with the aid of expiratory muscles it is unable to overcome the resistance of the sphincter to the passage of large fæcal masses. The sphincter here is merely a barrier. It is stimulated to excessive action by the hard masses packed against it, and cannot grasp and aid in its downward movement. Where the operation of stretching has been done the sphincter, no longer able to contract forcibly, offers but a passive resistance to the passage of the fæces. It can check the effect of the involuntary action of the intestines, but not when the expulsive force of the expiratory muscles are brought into play. This plan is certainly worthy of trial in intractable cases. Since reading Dr. Cleveland's article, three cases have come under my notice where the sphincter ani has been stretched for painful affections of the rectum. All were cases of chronic constipation previous to operation, and all were cured of that trouble, and by regular habits since have had no further difficulty in that respect.

In infantile constipation strict attention must be paid to diet, clothing, and regularity, and in this way many cases will speedily recover. In most cases, however, some treatment will be required until the digestion, circulation, and habits return to a normal condition. Frequently very simple means will suffice, such as soap or glycerine suppositories, and placing the child in position at regular intervals. If these fail, small doses of cascara sagrada with suitable carminatives are an excellent remedy. My experience has been that with due attention to hygienic measures combined with suitable medication by mouth cases recover more rapidly and surely than where we resort to the continuous use of enemas. Many good authorities favor the use of the syringe for children, and many others think it produces evil results. Like all our remedies it has its place, and is very useful in suitable cases, but its use can be abused.

DISCUSSION—THERAPEUTICS OF CONSTIPATION.*

BY A. M'KINNON, GUELPH.

The part allotted to me in this discussion, viz., "The Hygienic Treatment of Constipation," has been briefly considered by Dr. Mitchell in the able paper to which we have just now listened. In view of the importance to the public health of the community that the subject of constipation should receive every attention from our profession, I feel that I owe no apology for impressing on the mind of every member of our profession a few simple things relating to its hygienic management. Let me ask, What furnishes the quack medicine man his harvest? Not the acute diseases, but the slight, more or less chronic, ailments that arise from constipation. Almost all quack medicines are aperient in action, and when any benefit arises from their use the result is due to the removal of constipation. Is it not because, as a profession, we pay too little attention to these minor ills that many people seek relief from the hands of the quack?

It is undoubtedly true that, when serious disease arises, we rouse ourselves to action and fight for the lives of our patients as we would for our own. But why should we neglect these more trivial ailments? To the patients they are not trivial. No doubt it wearies us to listen to the minute

*Read before the Ontario Medical Association.

details they give, because we hear the same tale many times a day. To maintain our proper position with these people we should hear them with all patience, and give them to understand not only that they must avoid active purgatives, but also that to reach a cure of chronic constipation more than medicine is required. They must be prepared to follow advice as to diet, as to personal habits, as to exercise and bathing, not for a few days, but for many months.

From a hygienic standpoint, in the management of constipation, it is necessary that there should be great improvement in the closets of the masses of the people. True, the more wealthy have closets both convenient and comfortable; but among the poorer classes in towns and cities, and almost all classes in the country, the closets are simply disgraceful. In the summer they are usually so foul that no one can remain long enough to attend to the evacuation of the bowels. In the winter, with the thermometer down to 20° or 30° below zero, the delicate patient delays going as long as possible, and will surely hasten the action on account of the cold. The rectum should be emptied, but the patient should remain longer, so that anything that passes down into it from the colon shall also be voided. The habit of delaying the emptying of the bowel when the desire occurs is perhaps the surest way to bring about chronic constipation. It gradually induces in the rectum a tolerance for the presence of fæces, so that eventually the bowel ceases to advise the individual as to the necessity of action. From this view, then, the present uncomfortable and unhealthy closets in use among the masses of the people tend to produce constipation perhaps in a higher degree than any other single agency.

When constipation occurs, as it very often does in persons of sedentary habits, we must insist upon sufficient outdoor exercise. Walking is always available, but horseback riding, when practicable, is much more beneficial. To be useful, exercise must be regular and daily. As to diet, the physician will require to use his own judgment in each individual case. So often is indigestion, in varying degrees of severity, associated with constipation that it will not always do to insist upon a diet of porridge, brown bread, and large quantities of vegetables to give residue, in the hope in this way to cause daily action of the bowels. Such a diet may make the patient a great deal more miserable than he was before advice was given.

THERAPEUTICS OF CONSTIPATION—NEW REMEDIES.*

BY GEO. ACHESON, M.A., M.B., TORONTO.

In continuing this discussion, it falls to my lot to consider the newer remedies; and if with the older therapeutic resources it is necessary to inquire into the causation of every individual case, so also before making use of any of the newer methods of treatment should we make careful investigation of each patient's case to discover the exact pathological condition present, so as to be able to apply a rational therapy. There is no, at least there should not be, routine treatment for constipation. It is a symptom of many pathological states, and its treatment is as complex as its causation. These pathological states we may group as follows:

(1) Conditions where there is deficient glandular secretion—as in various lesions of the liver, pancreas, and mucous coat of the alimentary canal.

(2) Conditions where there is deficient intestinal peristalsis—as in central or peripheral nervous diseases, and atony or degenerative changes in the muscular coat of the bowel.

(3) Conditions where there is congenital or acquired mechanical obstruction, due either to structural modifications of the intestine itself, or to pressure resulting from some cause external to the intestine.

I take it for granted that the present discussion is concerned only with cases of constipation belonging to the first two groups, and so my remarks refer only to chronic constipation caused by some pathological condition of the functional, rather than structural, nature in the intestinal canal itself, or in some part of its nervous mechanism.

The treatment of constipation, as thus defined, by the newer remedies may be considered under the four heads of (1) mechano-therapy, (2) electro-therapy, (3) enemata, and (4) drugs by the mouth.

(1) *Mechano-therapy.* Under this head is in-

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cluded general exercise, Swedish movements, and massage. I shall refer only to massage. As I have said already, there should be no routine treatment of constipation, and so with massage there should be no routine practice in all cases without discrimination; but the employment of this therapeutic agent in any form and the particular procedure to be adopted must be settled by the careful study of each particular case. In general terms, we may say that massage is applicable to the second pathological group already referred to, and especially for women with lax abdominal walls, the result of frequent pregnancies, in constipation associated with obesity, and in that form which is found frequently in those who do not take enough exercise. In short, it is indicated in cases due to atony of the intestine from whatever cause, but the particular kind of massage to be employed differs in different cases, and must be determined by the particular pathological condition present. Into this department of the subject, however, we have no time at present to enter, and I can only just indicate in a general way the physiological effect of massage in the treatment of constipation.

(*a*) It increases intestinal and other secretions.

(*b*) It stimulates intestinal peristalsis.

(*c*) It acts mechanically by pressing accumulating fæces towards the rectum.

It is undoubtedly the best method of treating constipation which has resisted the other ordinary remedial measures. It should be employed daily, and for not longer than 20 minutes at a time, by a competent operator; for abdominal massage is one of the most difficult parts of the masseur's art, and must be performed skilfully, and with intelligent discrimination in order to obtain good results.

(2) *Electro-therapy*. Electricity in the treatment of constipation is indicated in cases due to general nervous disease, such as neurasthenia and chronic diseases of the cord, also in cases where the stools are hard and dry after cathartics. It excites intestinal secretion, and stimulates contraction of the muscular coat. Different authorities advocate different methods. Millican advises strong faradisation of the abdomen with a powerful coil, one pole being placed over the lower dorsal vertebræ, the other passed in the direction of the colon and generally over the whole abdomen, or a rectal electrode may be inserted and a large pad over the abdomen. Kollner advises electricity and massage combined, and prefers a weak current, as being less likely to paralyze nerves. Again, others prefer the galvanic current. The strength of the current should never be great enough to cause pain, and its application should not last for more than 15 minutes at a sitting. Evacuation of the bowels generally follows in from one to three hours after the use of the current. In some instances, after a longer or shorter course of electrical treatment the constipation is permanently cured; but in most cases it returns after the cessation of the treatment.

In ordinary practice it will seldom be convenient to employ either massage or electricity for the relief of this very common condition, so we must make use of some other means, and fortunately our resources are not limited.

(3) *Enemata*. In this class of remedies there have been one or two brought prominently forward comparatively recently, and the principal one is *glycerine*. This a most valuable agent both for children and adults. Like enemata in general it acts mainly on the lower bowel, and so is not indicated when it is the small intestine that is at fault, but rather in cases of fæcal accumulation due to torpor of the colon, and especially to atony of the rectum. The more fæcal accumulation there is, the more effective is this remedy. It acts by withdrawing water from the mucous membrane, causing an active hyperæmia, and thus setting up peristalsis, and it is usually very prompt in its effects. One of its great advantages is the small amount necessary, one-half to one drachm for an adult. Thus it is so applicable in the constipation of pregnancy where bulky enemeta cannot well be administered. Only chemically pure glycerine, such as Price's, should be used, and may be injected by a small piston syringe just within the internal sphincter. It sometimes produces an unpleasant burning sensation, which may be obviated by adding to it one-third water. In infants 5 to 20 drops is all that is necessary, and this may be administered either with a small syringe, or by, what is perhaps a preferable method, saturating a small pledget of absorbent cotton with a string attached and inserting this within the sphincter.

Glycerine may also be used in the form of suppositories, various kinds of which are now manufactured, but these will generally be found to be inferior to the glycerine itself.

Other enemeta that have been recently recommended are *yeast* in small quantities, and an infusion of *tobacco*, one drachm to the pint, half of this quantity being injected at once. I do not know that they possess any advantage over glycerine or soap and water.

Another drug has been lately recommended by Flatau which I may notice here, though it is not used in the form of enema; this is *boracic acid* in powder, applied by insufflation to the mucous membrane of the rectum in doses of 45 grains. It is serviceable in torpor of the colon, and causes strong peristalsis in from one to three hours.

(4) *Drugs by mouth.* Turning now to the administration of drugs by the mouth, we find a goodly number of so-called eclectic remedies which have been more or less thoroughly investigated and made use of by the regular profession for the last few years. These are vegetable preparations which act principally as hepatic and intestinal stimulants, and include *enonymin*, *juglandin*, *iridin*, *leptandrin*, and *baptisia*, which are somewhat similar in their action to the better known podophyllin and rhubarb.

Hydrastis in 5-drop doses of the tincture given in water night and morning is recommended for chronic cases; and collinsonia canadensis as fluid extract in doses of 2 to 10 minims, or as tincture in doses of 5 to 30 minims, is said to be useful in constipation due to hemorrhoids. Another drug that has lately come into use, of which we may expect to hear further good accounts, is *damiana*. It is similar in many of its actions to strychnine, stimulating the spinal centres and sympathetic system. It has proved very effective in overcoming the habitual constipation of certain classes of neurotics. It may be given in fluid extract in doses of one-half to four drachms in milk or glycerine three times a day.

By far the most useful drug, however, that has been introduced of late years for the treatment of constipation is *cascara sagrada*. It is especially beneficial in chronic cases where the digestive powers are weak, and one great advantage it has is that there are no secondary constipating effects. It is usually employed as the fluid extract, in doses of 5 to 30 drops from 2 to 4 times a day. The one objection to its use in this form is its nauseating, bitter taste, but this may be masked to a certain extent by giving it combined with glycerine and extract glycyrrhizæ fluid, or the cordial or elixir in drachm doses may be substituted. There is no better treatment for the constipation of gouty patients than *cascara*, and in general terms we may say that it is useful in all cases of deficient glandular secretion.

In reviewing thus imperfectly these additions to our resources in the treatment of constipation, personal experience leads me to place a high value on glycerine and *cascara sagrada*, and to say that while we cannot afford to do without some of the older and well-tried remedies, yet we will not be doing our patients justice if we neglect the employment of these newer methods.

June, 1892.

Selections.

IMPRESSIONS OF SOME OF THE NEWER DRUGS IN DERMATOLOGICAL PRACTICE.

BY CHARLES W. ALLEN, M.D., NEW YORK,
Surgeon to the City Hospital, Genito-Urinary Division, etc.

Ichthyol has had so much written about its value that I will refer to it only with a word. I have no hesitancy in stating my belief that in this preparation we have the best known application for erysipelas. I also believe it to be valuable in many cutaneous affections, not only as a reducing agent, but also as an antiseptic. In lichen, acne varioliformis, impetigo, eczema too much has been claimed for it by over-enthusiastic observers, but no doubt can longer remain that ichthyol is to have something more than the popularity of a day. I gave my views on ichthyol in erysipelas in the *American Journal of the Medical Sciences*, July, 1891, and I can only add that in about a dozen cases treated since then ichthyol has given uniformly good results.

Resorcin is another of the many new remedies which has weathered the storm. Articles unfavorable to this as well as ichthyol deterred me, in the early days of their introduction, from giving them the extended trial I otherwise would;

but more recently the value of resorcin in epithelioma, sycosis, various forms of eczema, intertrigo, ringworm, acne, rosacea, pityriasis rosea, and various other conditions, has been so manifest that for several years I have been employing it more and more. In several cases of pityriasis rosea cure was effected in a much shorter time than is usually required. It furnishes one of the best known means of cure in seborrhœal eczema, and seborrhœa in its several forms: and is of value in the parisitic diseases, especially tricophytosis and sycosis. In strong application it acts as a caustic, and may be employed as such in the treatment of epithelioma. I have had no successes to report. In pruritus the effect of resorcin is often very marked, and the relief afforded lasts for a number of hours. Unna includes it in his reducing agents. Ravogli has reported a case of dermatitis from its use. Care should be taken that the crystals are dissolved before being rubbed up with the ointment base.

Hydrogen Dioxide has of late attracted considerable attention as a microbe destroyer and disinfectant. For a long time it was sold more particularly as a bleaching agent, and one of its first uses in skin practice was on account of its power to remove pigmentary stains, etc. I have employed it for a number of years in removing from the skin and nails such discolorations as were produced by chrysarobin, pyrogallol, permanganate of potash, sulphur, and more recently the aniline dyes which have begun to play a *rôle* in dermatological practice. One day, at Richfield Springs, I was called to see a gentleman who had "turned black" after a sulphur bath, and by no amount of scrubbing had he succeeded in making himself presentable. He had been using a metallic ointment on the face and hands, and the sulphuretted hydrogen of the bath had done the rest. A little peroxide of hydrogen soon removed all discoloration and permitted the young man to rejoin the ladies. In another instance, an actress who had entered the bath without first removing the cosmetic from her face was forced to call upon me before she could leave her room. A solution of the peroxide soon removed the stains. Wherever there is pus to be destroyed, and especially subcutaneous collections of purulent fluid, we have in this preparation probably the best means of accomplishing our purpose. I have found peroxide of great service in paronychia and other affections of the nails. Even in a case of psoriasis of the nail-bed this remedy did more good than any previously tried, softening the thickened epithelium and causing the psoriatic spots to disappear. As a microbe destroyer, it is of decided benefit wherever the seat of the disease can be reached. Unfortunately, in such affections as sycoses, tricophytoses capitis, favus, etc., the microbe has its seat so deeply in the tissues that before the fluid can penetrate to it the more external tissues are swelled up by the fluid and offer a decided obstacle to further benefit. I have employed the fifteen-volume solution as a local application in comedones with some benefit. The black head is bleached in a measure, and there appears to be aside from this effect, a decided diminution in the inflammatory condition, and where pus and secretions are present they are oxidized and destroyed. If there is much inflammation of the parts or open lesions are present, the strength of the application may have to be decreased by diluting with water. For the application of the peroxide in ointment, it is better to use the ozonic ether instead of the watery solution, as Richardson has pointed out, because of its mixing more readily with fatty substances. Unna has given the following formula for acne:

℞. Lanoline . . 10.
Vaseline . . . 20.
Hydrogen peroxide . . 20-40.

I have recently used an ointment made by adding one part of the ten per cent. ethereal solution now on the market to five parts of vaseline. Such an ointment makes an excellent disinfectant to apply to the surface in scarlet fever. On ulcerations the action of the usually employed "fifteen-volume" solution—*i.e.*, such a solution of dioxide in water as will give off when decomposed fifteen times its own volume of oxygen—has seemed to me very beneficial, not only because it destroys by oxidation the pus present, but because it appears to have a direct stimulating effect upon the tissues themselves, an effect which can be increased up to the point of cautery by increasing the strength of the solution. In boils, abscesses, superficial and deep suppurating ulcers, moist secreting syphilitic patches, ulcers in the throat, and in various other

conditions, the peroxide has given excellent results.

Pyrozone is the name given to a fifty per cent. solution of hydrogen dioxide in ether (the fifteen-volume solution containing about four per cent.). This, when applied to the healthy cutaneous surface, produces an immediate whitening of the skin which remains for a considerable time, and is attended at first by a slight tingling and occasional sharp twinge of pain, and usually some subsequent itching. If the application is repeated on the same or following day, vesiculation will take place, and this sometimes happens after the first application. I have made use of this new preparation in several instances of chloasma, flat pigmented nævi, and flat warts, with gratifying results. In one case where it was brushed over the surface of a congenital pigment mark the size of a silver dollar, on a lady's neck, the pain was much complained of for fifteen minutes, and from the amount of surrounding erythematous redness it could be seen that a pronounced effect was produced, though blistering did not occur.

Dermatol is the name given to one of the most recently introduced substitutes for iodoform It occurs as a fine yellow, non-hygroscopic powder, odorless, non-poisonous, and non-irritating. It is formed by a combination of gallic acid and bismuth, and possesses marked cicatrizing and antiseptic properties, while its non-soluble nature in all ordinary media renders it free from toxicity.

As an antiseptic the gallate of bismuth has not been found equal to iodoform, but its lack of odor is a point in its favor. Applied to the heathy skin, in powder of solution, no effect is produced, it causes no irritation, and when applied to ulcerating surfaces or open wounds it produces no pain. Experiments have shown that it prevents the growth and development of micro-organisms. Clinically, it is found to be a valuable cicatrizing agent, and wounds heal up favorably under its use. So far as having any particularly prominent or pronounced action upon the skin or upon skin diseases is concerned dermatol is a misnomer. I have used it more as a dressing for wounds and after operations, instead of iodoform, more than I have in skin diseases, as already mentioned; in the few skin affections in which it has been tried it seems inferior to aristol, though an improvement on europhen. A burn of the foot and several burns of the second degree in children healed nicely under a two per cent. ointment.

In several cases of varicella I covered the individual lesions on the face with dermatol in plaster, with the view of preventing pitting. No pitting took place. I have used it in collodion as a wound dressing and in slight lesions of the skin with good effect, in ointment with lanolin and vaseline, and at the hospital in vaseline alone in ten per cent. strength. It can be mixed with starch or talcum, or both, for dusting-powder purposes in intertrigo, eczema, etc., and for hyperidrosis pedum. In ulcers it is inferior to the other powders as far as stimulation of a flabby or indolent base is concered. It can be combined with zinc ozide and starch to make a paste.—*Medical Record.*

FRACTURE OF THE PATELLA.—To the general practitioner there is probably no form of disease that will bring our reputation and skill more into question more than that of a bad result after a fracture. If you do not know your anatomy and remember it, you need never expect to have success as a surgeon or a bone-setter. To reduce a fracture and keep it in position is simply all that is required. Fracture of the patella is not an exception to this rule. Fracture of the patella is generally the result of muscular action, and hence it is almost always transverse; however, the fracture may be stellate compound or comminuted. Most of the fractures that are not transverse are due to direct violence, the most common cause of compound being a kick from a horse. In this paper it is my intention to deal with simple transverse fracture of the patella, as there seems to be no two opinions as to the procedure in compound fracture of the patella. Transverse fracture is, as I said before, generally due to muscular action, and this is quite plain if we remember the anatomical relations of the parts. To explain this I can do no better than to quote from Moullin: "Where the knee is flexed, the lower part of the patella rests upon the prominent portion of the condyles of the femur, and the upper is entirely unsupported, and the plane of the bone is almost at right angles to the direction of the quadriceps. If

this muscle suddenly contracts the whole strain falls upon one spot, and the bone gives way just as when a stick is snapped across the knee." Now we have our patella fractured, what occurs next? Displacement of the fragments; and upon the amount of displacement depends our treatment. Displacement of the fragments is due to four things: First, to contraction of the quadriceps extensor femoris muscle; secondly, to contraction of the ligamentum patellæ; thirdly, to distension of the knee-joint by blood and serum; and, lastly, the amount of separation of the fragments is due to the amount of pre-patellar aponeurosis and fascia torn. If the fascia is not torn or very slightly torn, we will have little or no displacement of the fragments, and bony union the result. Delayed union, non-union, and ligamentous union may in many fractures be due to constitutional or local conditions, but in no fracture do the same local conditions so uniformly interfere with the union of bone as in fracture of the patella. When the patellar fascia is not torn the diagnosis is not so easy, but not difficult. The effusion is not so great and not so rapidly absorbed as when the displacement of the fragments is greater. This is owing to the fact that the contraction of the muscle is not so continuous and is followed by a state of rest, and the effusion is rapidly absorbed. The amount of displacement and effusion is not an important factor in cases of non-union. McEwan, of Glasgow, was the first to point out this most important feature in non-union in fracture of this bone. He demonstrated the fact that you cannot have bony union on account of the aponeurotic structure interposing between the fragments, and here I may state that there is little use in wiring a patella if this interposition of fragments is not thoroughly picked and cleaned out. I hope I may not be considered bold or aggressive when I say that all ordinarily treated fractures of the patella when the fascia is ruptured, and where it is attended with any degree of displacement, cannot be considered at this day to be successfully or scientifically treated unless you have osseous union as a result; and to get osseous union must be our object in the future. Ligamentous union does not insure a limb as perfect functionally as before the fracture. How often do we hear of the same person having his patella fractured once or twice, and many cases are recorded where the same patella has been wired in two or three different places at different times, the surgeon in cutting down finding the old fracture as strong as any part of the bone, and the bone fractured in another place. I saw a case of this kind in Sir Joseph Lister's wards, King's College Hospital, last year. After seeing the wonderful results of this operation, I must say I became impressed with the idea that in all cases where we cannot get the fragments in direct apposition we should cut down and wire the bones. Most writers, especially the older ones, consider this operation unnecessary and unwarrantable. I cannot see it in that light, as, if we believe in antiseptic surgery and practise it to the letter of the law, the danger should be no greater than that of any other ordinary operation. In making your incision, make it long enough to give you plenty of room. It should at least be two and a half inches long. Open the joint freely. All effused material should be squeezed out; the joint thoroughly irrigated with carbolic solution; the holes drilled obliquely from the cutaneous to the fractured surface, so as to avoid the cartilage. After the joint has been thoroughly irrigated, the bones are brought together with soft strong silver wire, taking care that every bit of tissue is from between the fragments. Then carefully sew the aponeurotic structures together with catgut or silkworm gut. Lister does not pay much attention to this, but McEwan lays great stress upon it. Lister buries his large silver wire suture, while McEwan brings his out, and removes it in five or six weeks' time. Lister does not remove the wire suture at all, unless it causes irritation or becomes troublesome. McEwan dresses his wound with iodoform and rubs it freely into every crevice with his finger. In five or six weeks' time he begins passive motion, and it is truly wonderful the results he has. Lister, of course, uses his double cyanide gauze, and puts his leg up in Gouche splinting, and does not begin passive motion nearly so early. Most text-books will tell you to use drainage tubes, but unless you are not very particular about your antiseptics it is better not to use them. I noticed this more particularly in Mr. Watson Cheyne's wards, he having almost entirely dispensed with drainage tubes in all operations.

I know I will be freely criticized, as there are many dissenters from antiseptic surgery, and many who think the risk of converting a simple fracture into a compound too great; but with the strictest antiseptic precautions and aseptic procedures that mode is the ideal of surgery in fracture of the patella, for it restores the functions of the limb and joint perfectly.—*W. S. Muir, M.D., in Maritime Medical News.*

THE TREATMENT OF CHOREA IN THE HOSPITALS OF PARIS.—Marcel Beaudoin (*Revue de Therapeutique Medico-Chirurgical*, April 1st, 1892), after consulting the physicians of the hospitals of Paris, publishes the different opinions expressed regarding the treatment of chorea.

In ordinary cases See recommends antipyrin and arsenic as the best remedies. In rheumatic cases, the salicylate of sodium, according to this author, should be associated with the antipyrin and sulphur baths. In cardiac choreas, to the heart remedies should be added the administration of iodide of potassium, and especially the iodide of calcium.

Gilbert Ballet believes that common chorea tends to a spontaneous cure, and that, therefore, all disturbing medication should be withheld. He condemns antipyrin, but recommends arsenic (Fowler's solution in small doses, that is, from six to twelve drops a day, according to the age of the patient), tonics, and iron in anæmic cases. In serious cases he advocates the local application of ether to the vertebral column, and the bromides in patients laboring under psychical troubles. Above all, the author advises hygiene, a good alimentation, and walking in the open air, avoiding fatigue.

According to Dejerine all special medication in infantile chorea is useless. He recommends tonics, massage, gymnastic exercises, dry frictions, salt baths, and particularly insists in the application of good hygienic measures.

In mild cases, Joffroy attaches particular importance to allowing children to sleep as long as possible; in such instances he is wont to employ daily doses of from 1 to 1.75 grammes of chloral, according to the age of the patient. Fatigue, as well as all physical and mental excitement, should be avoided. In serious cases he believes that antipyrin is useless, and he then resorts to the application twice a day of wet cloths.

Antipyrin has given the best results in the hands of Albert Robin. He combines this drug with bicarbonate of sodium, and gives it in as high a dose as two grammes a day. After fifteen days' use, the antipyrin is substituted by the arseniate of sodium in doses of two teaspoonfuls a day of a solution of five centigrammes to 300 grammes of water. This solution finished, it is followed by the readministration of the antipyrin.

Raymond thinks that only two remedies are to be relied upon in the treatment of chorea: chloral and antipyrin; he has seen acetanilid do good in some cases.

Sevestre believes in the use of both antipyrin and arsenic. The first medicament is administered in doses of from one to two grammes, and even three and four grammes, a day. He employs, at the same time, Fowler's solution in daily amounts of from six to twelve drops, or a solution of the arseniate of sodium (five centigrammes in 250 grammes of water) in doses of two to three dessertspoonfuls a day.

Massage, according to Ollivier, has given satisfaction in the treatment of choreic patients. This author also prescribes, as a general medication, iron, arsenic, and hydrotherapy.

D'Heilly recommends hygienic measures, tonics, and prolonged sleep. In slight cases he thinks that such remedies as arsenic, iron, bitters, and baths are sufficient. In more serious cases he resorts to antipyrin and chloral as the best drugs.

Antipyrin is likewise highly recommended by Legroux in doses of four grammes per day. In hysterical cases the bromides and cold douches have given him the best results.

Comby insists in the application, *firstly*, of a moral and physical hygiene; *secondly*, in the sedation of the system by bromide of potassium, in daily doses of from two to four grammes, and the use of cold douches. If no amelioration follows this treatment, antipyrin, in daily amounts of from two to three grammes, should be resorted to.

Jules Simon gives the following points: (1) During the first fifteen days the child is to lie in bed, and revulsion applied over the upper part of the back, by warm frictions, mustard

plasters, or dry cupping, and the use of aconite and hemlock. (2) After this time, the child is made to get up, and then antipyrin should be administered in progressive doses of one, two, three, four, and five grammes in the course of the twenty four hours; this medicament to be continued for several weeks. (3) This period, especially when the movements are sluggish, should be followed by rhythmical gymnastics. The same author prescribes, at the same time, the least exciting tonics, such as salt-baths, dry frictions, etc.; but a stay at the seaside is condemned.—*Univ. Med. Mag.*

THE OATH OF HIPPOCRATES.—Although the complete works of Hippocrates are to be found on the shelves of nearly every medical library, in order to save our hearers trouble, and partly because the oath itself forms the most attractive portion of this short paper, we have given here in full the translation by Adams. "The oath: I swear by Apollo the physician, and Æsculapius and Health and All-Heal and all the gods and goddesses that according to my ability and judgment I will keep this oath and stipulation; to reckon him who taught me this art equally dear as my parents; to share my substance with him, and relieve his necessities if required; to look upon his offspring on the same footing as my own brothers, and to teach them this art if they shall wish to learn it, without fee or stipulation; and by precept, lecture, and every other mode of instruction I will impart a knowledge of the art to my own sons and those of my teachers, and to disciples, bound by a stipulation and oath according to the laws of medicine, but to none others. I will follow that system of regimen which, according to my ability, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and holiness I will pass my life and practise my art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and, further, from the seduction of females or males, of freedmen or slaves. Whatever in connection with my professional practice, or not in connection with it, I see or hear, in the life of men, I will not divulge, as reckoning that all should be kept secret. While I continue to keep this oath unviolated, may it be granted to me to enjoy life and the practise of the art respected by all men, in all times! But should I trespass and violate this oath, may the reverse be my lot!" After all the controversy that has raged with respect to the genuineness of this document, the weight of evidence seems to favor the opinion that the "oath" was written either by Hippocrates or one or other of his immediate disciples, despite the important fact that Galen does not include it in his list. There is nothing in the internal evidence which would give us a definite date. The appeal in the opening to special gods as patrons of medicine would show that it did not come from prehistoric times, in which all the gods were equally powerful in the healing art, while again the assertion of Sprengel that this invocation shows that the work issued from the Alexandrian school cannot be held to be more than a supposition. Beyond this, as we read it we are convinced that it is the work of doctors and of gentlemen —of men educated, as far as the times would allow, in the mysteries of the healing art, but who at the same time understood the proper position of the doctor in society, and who thought it right to insist upon the responsibility of all who dared to undertake such duties, and the necessity of not disgracing one of the noblest professions. . . . . —*F. R. Smith, A.M., M.D., in Johns Hopkins Hosp. Bulletin.*

SATISFACTORY TREATMENT OF THE TYMPANITES IN TYPHOID FEVER.—I have always considered tympanites as a dangerous element in typhoid fever; for I have seen several patients die apparently from the distention due to the accumulatad gases, a condition which I was unable to relieve satisfactorily. The bowels often fill up with alarming rapidity, this being probably the cause of perforation in many cases. I saw a case in consultation last year which was undoubtedly intelligently treated. The distention was in the extreme. So far as I was able

to determine the case was uncomplicated with perforation, and it seemed as though the man would live if relieved of the accumulation of gas. All of the usual methods had been applied—injections, aspiration, and rectal intubation—but with negative results. A similar case occurred in my own practice during the last year. A boy, 9 years of age, during third week of fever, *suddenly* developed an alarming tympanites. The abdomen was fearfully distended, lower part of chest wall was widely forced out, stomach collapsed and unable to retain drugs, food, or stimulants. Respiration was labored and rapid. This was a case that I had been holding up under heroic doses of stimulants, and without them he began to sink rapidly. I considered the end certain and close unless relieved of this condition. I tried all of the usual methods without giving the needed relief. I then used the injection which I commonly use in abdominal section: one ounce of salts, two ounces of glycerin, three ounces of warm water, and thirty drops of turpentine. In thirty minutes the child began passing liquid stools, accompanied with an immense quantity of gas, with very decided relief of alarming symptoms. The injection was repeated in a few hours for another rapid accumulation of gas, and with the same results. The child made a perfect recovery, although it was one of the worst cases I have ever seen. I have repeatedly used this injection since in milder cases for constipation and accumulation of fæces and gas, and it has seemed to be all that one could desire in its effects.—*E. T. Nealey, M.D., in Univ. Med. Mag.*

GUM-LANCING.—Dr. H. C. Wook, in the *University Medical Magazine*, speaks as follows: "I desire to express my hearty concurrence with a recent editorial in the *Dental Cosmos*, in which the editor, Dr. E. C. Kirk, criticizes the condemnation of gum-lancing, by Forchheimer, in his book on "Diseases of the Mouth in Children," as a therapeutic measure for the relief of various conditions. Clinically, I am absolutely sure that I have seen convulsions, sick stomach, great restlessness, fever, and various other functional disturbances in young children immediately cured by the use of the gum-lancet after the failure of various other well-directed measures for relief. Theoretically, I am in accord with Dr. Kirk in believing that Dr. Forchheimer absolutely misses the point of the matter by his failure to understand that the good achieved is not due to the local blood-letting or to the relief of the inflammation of the gum, but to the removal of the backward pressure upon an extraordinarily sensitive and, at such times, congested nerve-pulp. As was long ago pointed out by Dr. J. W. White, at the period of eruption the roots of the teeth are yet incomplete. 'Instead of the conical termination and minute foramen, which characterize a perfected tooth, the aperture is nearly as large as the root itself, and thus when the sensitive pulp, composed of connective tissue, blood-vessels, and nerves is in a condition of irritation because of the morbid activity of the process of dentition—augumented vascular and nervous action—there may be produced a hyperæmia sufficient, possibly, to cause the protrusion of a part of the mass from the incomplete aperture of the root, giving abundant cause for extreme constitutional disturbance.' I have myself seen a seemingly incurable epilepsy in an adult permanently cured by the removal of a persistent milk or first dentition tooth. Amaurosis and various other conditions in the adult are well-known to be the result of irritation of the trigeminal nerve by faulty teeth. How much more evil is to be expected from teeth irritation in the child. In conclusion, I reaffirm that whatever the theory in the matter may be, I am positive that gum-lancing is a most important therapeutic measure. It is essential, however, that it should be thorough, and with the object of dividing the dense tissues that bind down the teeth."

MERCURIALS IN INFLUENZA.—In a paper on influenza read at the recent meeting of the American Medical Association, Dr. Hemenway stated that he rarely had occasion to see a patient twice if he had given a large dose of calomel at the start. This was also the experience of Dr. F. Peyre Porcher, of Charleston, who wrote in an article in this journal that he never visited a patient more than four days after having given a mercurial and rhubarb purge at the beginning, as in yellow fever.—*Med. Rec.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, AUGUST 16, 1892.

THE ONTARIO MEDICAL COUNCIL.

We quite agree with the *Canada Lancet*, that Dr. Bray's motion about the appointment of a committee to confer with members of the profession was wise and temperate; but must adhere to the opinion formerly expressed, that it came far short of what was expected. When Dr. Meacham's bill came before the Legislature, THE PRACTITIONER opposed it for reasons already given. One of our strongest arguments was that an appeal should first be made to the Council, and others were duly impressed with the same idea. The proposed amendments received a strong support among the members. It is said the bill was "strangled in committee." We don't approve of the expression, but we have no doubt that its opponents showed more skilful generalship than its supporters. It has been openly stated, and we have every reason to believe that the statement is correct, that the proposed bill would have received the majority of the votes of the members present. We believe the passage of the bill would have been a serious mistake; but we must not on that account underrate the strength that lies behind it.

The meeting of the Council was awaited with considerable interest. We must congratulate the retiring president, Dr. Williams, on the great ability he showed on various occasions during the year in his defence of the Council's actions. His address at the opening of the meeting was a very able one; but it was simply an effort to justify every action of the Council which referred in any way with Dr. Meacham's bill, and showed no disposition to grant any one of the demands which have been made, and are now being made, by the Medical Defence Association. We are told by the *Lancet* that the address was "endorsed by each member of the Council present." We had scarcely understood that this address was to be considered as the ultimatum, and that the unanimous desire of the Council is to totally ignore all the demands of a large section of the profession in Ontario. However, we hope, we have reason to think that such a view of the situation is not correct; but that many members of the Council, if not the majority, will show a disposition to be conciliatory, and that the proposed conference will be productive of good.

It is only just to insist upon the fact that the Council has done much to raise the standard of medical education in Ontario. It contains a large number of able and conscientious men, who have probably worked much harder in the interests of the profession than its opponents have any idea of. We think its destruction would be a serious disaster. We cordially agree with everything said by Dr. Williams in that direction, and think many of the adverse criticisms recently indulged in have been harsh, if not unfair. We must recognize the fact, however, that it is confronted with a serious crisis, that delicate handling is required, and that wise counsels should prevail.

MEDICAL EDUCATION IN THE UNITED STATES.

There is in the United States a medical organization called "The Association of American Medical Colleges," formed for the laudable purpose of raising and governing the standard of medical education in that country. According to the *N. Y. Medical Record*, it has had a somewhat checkered history. It was organized originally in Philadelphia during the centennial year, and made but little progress for several years. In 1890 its strength developed somewhat rapidly, and at the annual meeting held this summer in Chicago the attendance was large, including a representation of over two-thirds of the medical colleges in the American Republic.

The representation from the South was small, and one of its few medical colleges in the association formally withdrew from membership. The reason for this step was purely commercial

in character—the standard of the association was too high for the schools of the "Sunny South." From one point of view this is a sad confession to make, as the standard referred to is far from high as the word is understood in nearly all other countries. However, the association is working in the right direction, and is likely to advance the character of medical teaching in all parts of the United States.

Clinical Notes.

A CASE OF INTUSSUSCEPTION.

BY JOHN R. STONE, M.B., PARRY SOUND.

Baby H., female, æt. 7 months, was brought to me from the country the 7th of March last, with the following history: Had been more or less constipated since birth. A few days before her illness had had diarrhœa, the stools being of a greenish color. On the afternoon of the 6th, being seated on the floor at the time, she suddenly gave a scream, and seemed in much distress. After this she was unable to retain anything on her stomach, and passed at times a little mucus and blood. She was given a purgative, which was at once rejected. During the night she would doze for a few minutes, and then, waking up, commence to cry. Seen twenty-four hours after the beginning of the illness she was well nourished, but pale, the extremities cold, and fretting most of the time, though not having great pain. She could retain no nourishment, and passed a little mucus and blood with tenesmus. Upon making a rectal examination, an invaginated mass of bowel could be easily detected. No tumor could be felt externally, perhaps because she would cry upon any attempt at palpation, thus rendering the abdominal walls tense. When making the examination the tenesmus was severe, and the bowel descended nearly to the anus. At the same time mucus and blood were passed. The child was placed at an angle of about 60°, and lukewarm water injected into the bowel with a Davidson syringe, the pipe being of the kind used in vaginal injection. It being very inconvenient, no anæsthetic was administered. The water was returned as fast as injected, and the straining was severe. The pipe was, however, kept tight to the side of the bowel, and after a time the tenesmus became less, and the child seemed much easier. After pumping for about an hour and a half, I was hastily summoned to another urgent case in town.

Upon my return the child was asleep, and I was told that although she had not yet had a normal motion, the vomiting had ceased and she had taken some food. I decided not to disturb her, and left word for the parents to call me if the symptoms should return on her waking. I was informed early in the morning that the child was vomiting blood. Upon making an examination, the mass was still where it had been. An œsophageal tube was tried, but the tenesmus was too great to admit of its presence. The pipe used in the first place was again resorted to, the child placed in the same position, and after pumping for about an hour she suddenly straightened out, turned pale and cold, and her eyeballs rolled up. She was given a little brandy, placed in bed, and wrapped up warm. She soon came around all right, and upon making an examination the invagination had disappeared. Her whole appearance was now changed. She was soon asleep, and a couple of hours after had two small but natural motions. She continued to improve, and was taken home the next day.

Book Reviews.

Annual of the Universal Medical Sciences. Edited by Chas. E. Sajous, M.D. Vol. IV., 1892. The F. A. Davis Company, publishers, Philadelphia, New York, Chicago, and London.

Vol. IV. deals again mainly with specialties, as did the corresponding volume of last year—diseases of the skin; ophthalmology; otology; diseases of the anterior and accessory nasal cavities; diseases of the naso-pharynx, pharynx, tonsils, and soft palate; diseases of the larynx, trachea, and œsophagus; and so on, not to recopy the entire table of contents. Perhaps the most interesting chapter is one upon "Intubation of the Larynx," by the veteran J. O'Dwyer, of New York. The chapter on "Legal Medicine and Toxicology," by Professor Draper, of Harvard, has an interesting dissertation and collation of cases upon spontaneous combustion.

Birdsall, of New York, writes a chapter on "Inebriety, Morphinism, and Kindred Diseases," and shortly discusses the bearing of morphinism upon life insurance.

Correspondence.

Editor of THE CANADIAN PRACTITIONER :

DEAR SIR,—I am very glad you made such an amusing conjunction as appears on page 360 of THE PRACTITIONER of August 1st, 1892. Such lets us see ourselves as others see us. But, dear sir, permit me to say: (1) I did not know such a notice was in the Kingston *British Whig* until I learned it from the article in your journal, page 360. (2) As I know nothing of the matter, I have the editor's permission to say that the office alone is responsible for it. (3) After all, it is not an "advertisement," but merely the simple statement of a fact, not, perhaps, in very good taste. With the propriety or impropriety of such notices I shall not now trouble myself more than to say that I do not believe they do any surgeon any good whatever.

Yours truly,

THOS. R. DUPUIS.

Kingston, Aug. 8th, 1892.

Obituary.

DR. A. A. B. WILLIAMS.—It is with deep regret that we announce the death of Dr. Williams, who graduated this year in the University of Toronto. He was a son of Dr. N. W. Williams, Brampton, and a grandson of the late Rev. John Williams, D.D. He began practice in Belgrave, where he had succeeded Dr. Godfrey. Although only a few weeks engaged in active work he was doing well, and it seemed as if unusual success were ensured. On the 26th of July he first complained of abdominal pain; this proved to be due to peritonitis, grave symptoms developed, and death ensued five days after the first appearance of his trouble. Dr. Williams had many friends in Toronto, particularly among his class fellows and teachers in the University. He was a general favorite, and was known to be an industrious and enthusiastic worker, attaining a high standard of success in his classes. The death of a young man whose life seemed full of so much promise is extremely sad, and we extend our heartfelt sympathy to his relatives.

Therapeutic Notes.

THE TREATMENT OF DIABETES.—Dr. Charles H. Ralfe believes that in protracted cases of diabetes there should be no relaxation of the restricted dietary; whilst the extreme sensitiveness to the minutest particle of starch and saccharine food exhibited when the glycosuria is still controlled by absolute restriction of the diet tells equally against its resumption. The next consideration is whether the advantages gained by a strict adherence to an absolute diet of proteid substances by diminishing the amount of sugar in the blood, and so checking the tendency to further lowering of the assimilative processes in the body and controlling the extreme diuresis, may not be gained at a too great expense to the patient's well-being, and that some benefit may be derived by permitting a slight relaxation from a too rigid proteid dietary, and whether its too long continuance is not in itself a danger by causing the formation in excess of bodies such as the morbid products of proteid metabolism. In diabetes with a flesh diet there is a positive entrance of an increased amount of acid salts into the body which at an early period of the disease are eliminated by the kidneys, but when the bodily powers begin to fail they accumulate to a dangerous extent. Added to this is the fact that with increased feebleness the power of digesting proteid material is lessened, and consequently the risk of the formation of toxic bodies in the intestines is increased. Admitting the risks attendant upon a proteid diet, it is not believed that any relaxation from it can obviate them. Two measures will be found to be of benefit, namely, in diminishing the amount of proteid material as the patient's powers of digestion fail, and in prescribing general and abdominal massage. So far as the opium treatment is concerned, so long as the glycosuria can be removed by diet it is unnecessary. When used it should be administered by the mouth, about an hour after the meal; the preparation to be used should be a combination of liquor opii with acetate of morphia in solution,

and the dose should be one sufficient to entirely control the glycosuria, remembering, however, that diabetics are singularly tolerant of this remedy. So long as opium effects a reduction in the amount of sugar, we may safely increase the dose. If, however, the sugar excretion gains ground in spite of diet and opium, it is not wise to increase the dose.—*London Lancet.*

A REMEDY FOR CHRONIC RHEUMATIC ARTHRITIS.—Mr. Hugh Lane, in his recent work on Rheumatic Diseases, again emphasizes the value of the old recipe commonly known as the "Chelsea Pensioner." Lord Anson is said to have given three hundred pounds for the liberty to make it public.

℞—Honey, ℥xvi;
Sulphur, ℥i;
Cream of tartar, ℥i;
Rhubarb, ℥iv;
Gum guaiacum, ℥i;
Nutmeg, no. i.—Misce.

Sig.—Two tablespoonfuls in a small tumbler of white wine and hot water on going to bed, and the same quantity before rising in the morning; the patient to remain in bed until any perspiration that may be occasioned has subsided.—*International Med. Mag.*

Miscellaneous.

MEDICAL LEGISLATION—PUBLIC HEALTH.

At the recent meeting of the Ontario Medical Association, the report of the committee on legislation which was adopted by the association will be of interest to the general profession. The report read as follows:

Your committee find that several bills amending the Act, or affecting the profession, were brought before the House at the last session. One to repeal the clauses of the Medical Act giving the Council power to tax the profession for its support; giving the registrar the power to remove the names of defaulters from the register a year after having being notified of such default; and to amend other clause of said Act so as to nearly double the territorial representatives, and to make the term of their office three instead of five years.

Another bill to amend section 48 of the Medical Act so that the application of plasters to "draw out cancers" or to heal sores shall not be practising medicine or surgery within the meaning of the Act. And a third bill to make it more difficult or impossible for the medical schools to obtain the unclaimed bodies of those dying in charitable institutions.

The bills so far have failed to become law, and your committee cannot help feeling that they were unwise and uncalled for. Your committee feel that it is unwise to repeal or amend the Medical Act until its working has been fairly tried. They feel it is not in the interest of the profession to appeal too often to the Legislature; and that so long as we are represented in the Council by members of our own choice, and whom we can remove when they cease to represent our views, it would be fitter to bring pressure to bear on them than to call in the aid of the Legislature.

That whatever may be the faults and defects of the Medical Act, it has conferred a great boon upon the profession.

We see the profession in the States looking upon our position with envy, and in some of them attempts are being made in a very tame manner to copy our system. There is scarcely a respectable medical man in the States who would not gladly accept our Act if its expenses to him were double those that we pay.

And your committee cannot help feeling that our too often applying to the Legislature is lowering to the profession and endangering to the Act, but feel, at the same time, that the Council should be in touch with the profession, and should, as far as may be, reflect its opinions. And we feel that is unfortunate when any of the general members of the profession have an opportunity to think they have a grievance against the Council, and would therefore suggest that before asking the Legislature for any important change in the Act, or making any important change in the curriculum or their procedure toward the general profession, the Council should ascertain the opinions of the profession with regard to such changes. This might be done through the local societies, where such exist, by means of circulars issued by their secretary, or by each territorial representative ascertaining the views of his constituents.

We make these suggestions with a great deal of diffidence, and mainly in order to bring them before the association. And we hope they will be fully discussed, as we cannot conceal from ourselves that the question is a very important one, and that perhaps upon our action the future welfare of the profession may largely depend.

We feel that to relieve those who apply caustics to cancers from the penalties of the Act would be in the highest degree unwise. It is notorious that in numberless instances great and unnecessary suffering is daily caused by the application of these caustics to harmless growths, and that in numerous instances death is the result of the application of escharotics by persons ignorant of the first principles of medicine and surgery.

The other bill, if passed, would have greatly reduced the already scanty supply of anatomical material at our medical schools, and would have a tendency to drive our students to countries where the people were more enlightened and subjects easier to be obtained. Dissection cannot harm the subject. It can only be the effect upon living friends; who then so proper for a subject as he who leaves no friends?

We think the public mind needs education with regard to this subject, and that the press and the profession might and should do a great deal toward it. The ordinary layman thinks the medical mind differently constituted from ordinary humanity, and that the anatomist dissects a subject for mere amusement; that, as the old French pathologist has said, to answer the question in the rubric, "What is the chief end of man?" by "To furnish pathological specimens," so the anatomist thinks his chief end is to furnish work for his scalpel.

The report of the Committee on Public Health, which was adopted by the association, should demand the attention of the practitioners and the public. The report read as follows:

Your committee would report that since the last meeting of the association the province has been fortunate in not being visited with any outbreak of smallpox, and that contagious diseases other than diphtheria have not caused any serious mortality in Ontario.

Regarding the latter, your committee would express its regret that in spite of the efforts made by physicians and boards of health generally many outbreaks have been reported from every part of the province, and that some of these have been of an extended and fatal character. While the cause of the disease is generally understood, it is not so well known to the public or appreciated by the profession that the disease under ordinary conditions is of an intensely contagious and infectious character. This being the case, your committee would urge upon the members of the association; and through them the public, the necessity of making known to the proper authorities by every means in their power the locations where individual cases exist, so that the authorities may not only warn the public to shun contagion where exposure is unnecessary, but in cases where local isolation, through poverty or other cause, is impossible the local health authorities may remove such to houses or hospitals where isolation may be properly carried out.

Especially would your committee direct attention to the danger of the spread of this fatal and prevalent disease through the medium of schools, public and private, Sunday and charity schools. Much attention has been given to sanitary matters by municipalities during the past year in the matter of public water supplies and systems of sewerage. Everywhere the necessity of a pure water supply is making itself apparent in outbreaks of typhoid fever, and the importance of controlling both public and private supplies is being daily better understood by the public.

That an immense impetus has been given to public health work by the establishment of permanent boards of health is fully appreciated by your committee; but it also very fully recognizes that by the great advances made in physical and medical science, but notably in biology and chemistry, has the present improved status of public health legislation and executive control of disease been made possible.

TREATMENT OF THE TZAR'S CONSUMPTIVE SON.—The Grand Duke George, the Tzar's second son, who, ever since his enforced return through illness from his Indian tour, has been under medical treatment for pulmonary disease, has been passing the winter at Abbas-Tuman in

to associate them with any particular causative nerve lesion. Zoster is peculiar in this, that associated with the pain and eruption of inflamed, often gangrenous, vesicles and loss of vitality in the site is an inflamed condition of the corresponding nerve and its sheath, the subsidence in which is attended with the disappearance of the eruption; not always, however, with entire disappearance of the indications of disturbed nerve function, as evidenced by the persistent hyperæsthesia, or more often, I think, anæsthesia that remains sometimes permanently. In a recent case I found anæsthesia present over three months after the subsidence of the eruption, and in another the skin was insensible to the prick of a pin more than a year after; both these cases were lumbo-femoral, but I have seen the same thing also in intercostal zoster. Zoster would seem in some respects to be allied to the exanthemata, such as smallpox, measles, etc., since, like them, it runs a definite course, usually of about ten to fifteen days, which is not altered or lessened by treatment; and attempts at aborting the attack by local measures, such as nitrate of silver, not only, I think, invariably fail, but tend to make the disease more severe. Another point of resemblance is the occurrence of zoster more frequently at certain times than others, so as to be almost epidemic. It has been especially prevalent during the past winter, and I have noticed the following distributions of the eruption, two of the ordinary intercostal variety, two lumbo-femoral, one occipital, the eruption commencing near the root of the neck and extending upwards into the scalp nearly as far as the anterior fontanelle, and round the side of the neck to the angle of the jaw on the right side. Another case was remarkable in commencing near the spine about the middle of the nates and passing forward. The patches of vesicles extended down the outside of the thigh; a line, however, extending along the upper and anterior surface of the thigh and along the dorsum of the penis. Another case attacked the shoulder and the line of distribution was over the supra-spinal region of the scapula. This is rather a digression from the point I was referring to, the resemblance of the disease to the exanthemata; and no one, I think, can see the often well-defined vesicle, with its strongly inflamed base, without being reminded of that of smallpox. I do not know whether the subject has ever been investigated with the view of ascertaining whether the condition of the roots of the spinal nerves or the cord itself in variola presents a similar appearance to that of zoster, but there would seem to be reason for expecting such a condition when the severe pain in the back that precedes the variolous eruption is compared with the neuralgic pain preceding and accompanying zoster.

Into the question of the pathology of zoster, I do not feel able to enter. I know of no investigations more recent than those of Haight and Budiasecki referred to by Tilbury Fox. They found the nerve swollen in the neighborhood of the disease, the neurilemma filled with small round cells, the medullary substance and axis cylinder enlarged. It has been suggested that the real seat of the disease is not in the nerve trunks themselves, but in the sympathetic nerve fibres of the spinal ganglia, which affect tissues through the trophic which arise from these glanglia (Barunsprung, quoted by Tilbury Fox); but this seems to be more conjectural than actually proved.

Lastly, as to treatment. As I have already remarked, attempts at abortive treatment have generally been failures, as might be expected from the cause. The disease occurs for the most part in persons whose vitality is low, either from age, mental depression and worry, or debility, however caused; hence, as a rule, the chief indications for general treatment are for plenty of light, easily-digested, nourishing diet and tonics, such as mineral acids and strychnia. The affection is self-limited, and its course does not appear to be altered by any treatment. Locally, our efforts are chiefly directed towards the relief of pain, and works on medicine give various remedies that have been used for this purpose. I shall only refer to what I have myself found beneficial. If the pain is great and prevents sleep, I usually give an opiate internally, either morphia or Dover's powder, and find them more efficient than bromides or chloral, or the antipyretics, antiebrin, antipyrin or phenacetin. I have used all these, but think them inferior in this affection to morphia. Locally, I have found more relief follow a 10 per cent. solution of menthol in olive oil frequently applied than anything else, though sometimes ointments or collodion containing atro-

pia or morphia, or solutions of carbolic acid in water or oil, answer better. Protection of the inflamed surface from the air, and especially from friction by the clothing, is also essential. I have tried a mild galvanic current, the negative pole applied to the spine and the position over the eruption, but without, as far as I could see, any beneficial result. On account of the extreme sensitiveness of the eruption, but a very weak current can be borne. Possibly the subsequent hyperæsthesia or anæsthesia might be advantageously treated in this way.

The prognosis of the affection is usually favorable, but I always feel, in very old people, that the occurrence of an attack of zoster is serious matter; since although the attack is generally recovered from, yet it often proves to be the commencement of a general breaking up of the system that leads to a fatal termination within a year or two after. In such cases the eruption is apt to be almost gangrenous in appearance, and the resulting cicatrices are deep and permanent.

BRAIN INJURIES*

BY DR. OLMSTED, HAMILTON.

M.S., æt 17, a large strapping fellow, 5 feet 10 inches high; weight 175 pounds; a farm laborer, admitted into City Hospital, Hamilton, 8th February, 1892.

Complaint: Dizziness, severe attacks of pain in head, and staggering gait.

Family History: Father died at the age of 26 years of phthisis. Mother alive, æt. 38; healthy. Mother remarried. Patient has one brother and one half-brother, and three half-sisters, all alive and healthy, except the half brother, who probably had infantile paralysis, as one leg is less developed than the other.

Previous History: Had compound fracture of the elbow-joint when 6 years old, and measles at age of 7 years; otherwise had excellent health till June, 1891. No syphilis. Patient while lifting some farm implements felt a sharp shooting pain, beginning on each side of the head near the temples, and extending from the points up towards the vertex of skull, where they apparently met. The pain was felt on the top of the head at intervals of one or two weeks during the next three months, and always had the same characteristics, coming on suddenly, being a sharp shooting and very severe pain, radiating from the point of the commencement, and it always compelled the patient to sit down. The attacks would last from ten minutes to one or two hours, with intervals perhaps of two or three weeks, during which time he felt as well as ever. Sometimes, however, there would be a succession of attacks lasting two or three days. At first the pain would commence on top of head, but gradually shifted backwards until it located itself at a point corresponding to the occipital protuberance, and since September, 1891, the pain has always started from this point. In November he noticed a sort of scum come over the eyes, which would last two or three minutes and then pass away. Sometimes when he would look out he could not see anything. These attacks of loss of sight would come on two or three times a day, and he could not read. He did not appear, however, to get worse. About the beginning of January, 1892, he noticed that his gait was unsteady and could not walk straight. The ground felt to him normal. Shortly after the ataxic gait was observed he began to suffer from vertigo, and at times would fall down.

Present Condition: Boy well developed, intelligent; pupils widely dilated, with atrophic double optic neuritis; vision impaired, appetite good, bowels regular, muscular powers good, sensation normal, knee phenomenon slightly diminished on both sides; when he walks he has an irregular, reeling gate, with a tendency to go to his right. He keeps his eyes on the floor, and has great difficulty in walking with the eyes closed. The right foot at times comes down a little heavier than the left one. Can stand with the feet together and the eyes closed. He sleeps a good deal during the day, but can be roused easily and always answered questions intelligently. During February and March patient would have an attack of pain every day or two, which would last about ten or fifteen minutes. The pain comes on suddenly without any warning, situated over occipital protuberance, shooting from this point up the head and down the back a short distance. No spasms. Says his head feels as though there was a ton weight on it. His face and head is bathed in perspiration and congested. Pupils enlarged; pulse slow, 40-48,

*Read before the Ontario Medical Association.

thus differing from its usual 70-80 beats per minute. There is a numb feeling that starts in the hand or face, and may extend over the whole body. His speech is thick, and the words are run together. During the attacks he has a tendency to lean towards his right side. He cannot walk more than a few steps in a straight line. After the attack is over he has a tired feeling, but can speak correctly. Vision impaired about $\frac{6}{9}$.

On February, the 27th, patient had a bad attack; became unconscious, and on opening his eyes an external squint was seen, but on rousing him it was changed to an internal squint. During the following two or three days he had diplopia, which, however, was not present all of the time, and was probably due to central irritation On 28th March, while looking out of the window, patient felt a numbness comes over him, became unconscious, and fell backwards, to his right. His fall was arrested by the nurse and ward tender. His hands and arms twitched, face much congested, perspired freely, and was unconscious for about two minutes. He then complained of the great pain in the back of his head, which left him in about six minutes. During April patient had attacks on the following days: 2nd, 9th, three on the 10th, 11th, 18th, 19th, 22nd, 23rd, and two on the 29th. He also vomited quite frequently. During May he felt exceptionally well, not having a single attack. He has been treated with potassium iodide, and during the last two months he has been taking half an ounce of this drug daily. When the pains were very severe and persisted longer than usual, he was given ten or fifteen grains of exalgine, which gave him more relief than anything else tried.

It is thought that he has a tumor either springing from or pressing on the middle lobe of the cerebellum. Some authorities do not think that pressure on the middle lobe can produce the so-called cerebellar ataxia; but when it has been observed in large tumors of the lateral lobes of the cerebellum as well as tumors of the corpora quadrigemina, absence of oculo-motor paralysis aid us in excluding growths in the latter situation.

As to the probable nature of the growth, we know that tubercular tumors are most frequently found in the cerebellum, and also, according to Seguin, that they are benefited by iodides. I certainly do not think that it is specific. The lowering of the pulse during an attack of pain, and its rapidity between attacks, is very interesting. How is it to be accounted for? His sight has much improved lately, being now $\frac{20}{20}$ nearly. There is a small hemorrhage in left eye.

PUERPERAL ECLAMPSIA.*

BY DR. RAIKES, MIDLAND.

Puerperal eclampsia occurs in Germany once in 665 confinements, in England once in 414, in France once in 273, in Sweden once in 167, in Belgium once in 135, in the State of Ohio once in 150. In Canada I have not yet been able to find the proportion; but in discussing the subject with a practitioner in Toronto, who has had a very large obstetrical experience, I was informed that in 1000 confinements he had not lost one from eclampsia. My own experience has been 7 in 375, or 1 in 53. Of these seven, three were in one small village, as well as three others which I saw there in consultation; or out of a total of thirteen cases of which I have notes, six occurred in the one locality. Of these six cases five were fatal; the one recovery being the case of a primipara, who had only one mild convulsion.

This very large proportion of serious eclamptic cases in the one locality has led me to enquire if there might not be found an exciting cause of the disease in the surroundings or ingesta of the pregnant woman.

I have most carefuly searched through all the literature bearing on the subject at my command, but with negative results.

I had hoped to embody in this paper a report of an analysis of the drinking water used in the village where so many of the cases occurred, but unfortunately it has not yet been completed. However, the soil is a vegetable mould, a few inches only in depth, resting on the limestone rock. One would therefore expect to find the water strongly impregnated with calcium carbonate.

Again, in Belgium, Sweden, and the State of Ohio, where the ratio of eclamptic cases is relatively high, the geological formation is largely

*Read before the Ontario Medical Association.

limestone. In Toronto, where, according to the figures I have given, the proportion of cases is low, the water supply, however rich it may be in organic matters, is certainly not strongly charged with lime salts. Bearing these facts in mind, I think it is fair to assume that the presence of lime salts in the drinking water favors the formation in the blood of those toxic materials which in the altered nervous condition, associated with pregnancy, induce eclamptic seizures.

Of course it may be argued that the apparent large proportion of cases occurring in the one locality of which mention has been made may be only a concidence or due to some other causes than the one assigned, such as fright, mental emotion, tight-lacing, as Howard suggests, or the like, but these causes operate principally upon primipara; yet in these six cases only three, or 50 per cent., happened in the first confinement, whereas the usual proportion is 80 per cent. I came across a case this spring which bears on the same point. Mrs. G.B., æt. 20, who had gone through four uneventful pregnancies, spent the winter on an island of limestone foundation in the Georgian Bay, some forty miles from any settlement. At the end of the seventh month she was taken with eclampsia, from which she was some days in recovering consciousness and sight. Her husband, a fisherman, secured a team and brought her to Midland. I found her still stupid, her face, hands, and legs much swollen, urine scanty and highly albuminous. Under milk diet and diuretics, the albumen and swelling rapidly disappeared. At the end of the eighth month, she was delivered of a macerated fœtus.

As for the reason why an excess of lime in the drinking water should so injuriously affect the pregnant woman, whilst it appears harmless to others, I can offer no solution; but hope by bringing the matter before this meeting to get some light on the subject.

What the nature of those toxic substances which, circulating in the blood, cause the convulsions may be, we are still in doubt; but that the child usually assists in their production there can be little doubt, from the fact that the evil usually arises in the latter months of pregnancy and disappears upon the death of the child.

In the treatment, I have learned from a very gloomy experience not to trust to theoretical remedies. My first five patients, treated with chloroform, bromide, chloral, and pilocarpine, all died. The next six all recovered—four of them with the aid of large doses of morphia hypodermically, one with chloroform alone, the other, the case referred to above, with no treatment whatever. Of the five fatal cases, two were, I think, drowned in their own bronchial mucus, secreted under the influence of the pilocarpine. Veratum viride I have never yet tried; but from the very glowing accounts of those who have used it, I think it certainly worthy of a trial.

As the toxic materials in the maternal blood are almost invariably fatal to the child if gestation be prolonged after the first attack, it is better to induce labor at once, and so very much improve the mother's chances, without adding to the danger of her offspring. But far more important is the preventive treatment; for I am satisfied that if we could only persuade every pregnant woman to place herself under the care of her physician at least three months before her expected confinement, puerperal eclampsia would soon be numbered amongst the diseases of the historic past. As to what that preventive treatment should be, in every case where uræmic symptoms have manifested themselves I would insist on a purely milk diet, saline purgatives, as required—preferably the mineral waters, if the patient can afford them—the muriated tincture of iron and bi-tartrate of potash. But, above all, let us impress upon our child-bearing women how much simpler it is to prevent than to cure the evil some of them stand so much in dread of.

Selections.

THE ADDRESS IN SURGERY: BRITISH MEDICAL ASSOCIATION.

The Address in Surgery, which appeared in the *British Medical Journal* of July 30th, p. 236, was delivered by Dr. W. H. Hingston, of Montreal.

Mr. Lawson Tait, in proposing a vote of thanks to Dr. Hingston, said that in his prettily worded prologue Dr. Hingston apologized for himself in that he came before them as a child

of Canada. It would be seen that Dr. Hingston was a well-grown and remarkably good-looking child, and in that respect he very fairly represented the country from which he came. He (Mr. Lawson Tait) regretted that Dr. Hingston had not told them more in his own eloquent words of the country from which he came, for he had most modestly kept in the background much that might have been said in praise of the progress of that immense district. Only as recently as the year 1866 that great Dominion was practically in a condition of rebellion. Since then not only had it become peaceable and tractable, from the Red Indians up to the highest class of the immigrant population, but it was now one of the most successful, the richest, and most promising countries of the world. Without being political, he might say that that change had been effected very largely by the Canadians being left to themselves. The surgical progress of Canada had kept pace with the national progress, and no better example of its progress could be presented than Prof. Hingston himself. When he (Mr. Tait) landed in Canada for the purpose of addressing the Canadian Medical Society, he thought that he should escape with some very average contribution to surgical literature, delivered to a small handful of, perhaps, thirty or forty men. But he found that he had to reconsider what he was going to do, for he addressed some hundreds of men who were their equals in every way. Sitting at the dinner table at Dr. Hingston's right hand, he remembered conversing with a young gentleman who spoke very fluently and cleverly about everything except the practice of medicine and surgery, and he thought he had obtained the advantage of getting a lay Canadian whom he could pump upon Canadian politics. The conversation was most interesting, and when he at last took the liberty to ask with whom he was conversing, the reply was, "I am the Professor of Anatomy in the University of Winnipeg." He had heard of Winnipeg as being in the year 1871 "two mud huts and a post-office," and in 1884 he found a man who was paid a good salary—a competent, clever, and intelligent gentleman—who had to do nothing but teach anatomy in the University of Winnipeg! That showed what had been done in twelve years, and that was the way in which progress was made in Canada. It was intellectual progress just as much as it was material progress. The professional work in Canada was quite up to the level of anything in Europe. He heard addresses and lectures given, and saw operations performed, which would have reflected credit on the mother country. He thought that Dr. Hingston had hardly given his countrymen their due merit. Men came to attend the Canada Association not only from Winnipeg, but from Fraser River and distances which would mean very much the same as a journey to Constantinople. He would ask how many members there were of the British Medical Association who would be willing to travel not scores of miles, but thousands of miles, in order to attend its annual meetings? He did not believe there was a single member present who would do it. It was to him a very great pleasure to meet Dr. Hingston again, and to express the hope that he would live long to grace the profession in his own country.

Mr. Croft had infinite pleasure in supporting this proposal. He was a new acquaintance of Dr. Hingston's, and it was one of the proudest moments of his life that he had the opportunity to say that he had become one of his acquaintances, for no one could come within reach of his influence without feeling that he had been in contact with one whose influence must do him good. Dr. Hingston was a son of Canada. He had come, as Mr. Lawson Tait had implied, thousands of miles to be present at these meetings. They welcomed him, and hoped that he would take back to his friends in Montreal very pleasant recollections of Nottingham. He could assure him that whenever any of his brethren came to England they would meet with a most hearty welcome.

The president said every one present must feel grateful to Professor Hingston for the labor he had undertaken and the pleasure he had afforded them. They already felt intimate with him, and hoped that that intimacy and friendship might long exist. He asked them to receive the resolution with acclamation.

The resolution was carried by acclamation.

Dr. Hingston said he was deeply grateful to the association for the warmth of the reception that they had given him. He was grateful to Mr. Lawson Tait and Mr. Croft for the very

kind words they had thought fit to use in his regard. On his return to Canada, though without their eloquence, he would try to imitate their warmth in conveying to his colleagues on the other side a faint impression of what he had experienced amongst his English brethren.—*British Medical Journal.*

THE COLONIES AND THE BRITISH MEDICAL ASSOCIATION.

At the recent annual dinner of the British Medical Association, Mr. Ernest Hart proposed the toast, "The Colonial Branches." He said that when that great British statesman and orator, Canning, made it his boast that he had called into existence the New World in order to redress the balance of the Old, he could hardly have foreseen, even with his transcendent abilities and prophetic vision, the illimitable development of those great territories and colonies that our national genius for war and commerce had founded. Even now, to home-keeping minds, it was difficult to realize how vast were the interests represented in the toast that he was about to propose. In the one colony, for instance, Canada, in which their three most recent branches had been formed, they had a territory thirty times as great as Great Britain, stretching from the hyperborean borders of the Arctic sea to the Atlantic, with a latitude corresponding to France, Germany, Spain, and England. And in the newest ground of that marvellous dominion of grass lands and forest, of glacier mountains, prairie, and cornfield, and of internal seas—where one had the luxury of being seasick 2,000 miles from the ocean—the first of their Canadian branches and the most recent had been formed at Winnipeg, a place as to which Lord Wolseley not many years since made it his boast that he was able to conduct an army there in two months from Montreal, a distance which was now traversed in three days in a palace car, lighted by the electric light, and provisioned by a French *chef*. It was in that town of Winnipeg only a short time since that he had had the honor of addressing a considerable body of professional men on a site now worth millions of dollars, but which, in loving memory, had been sold for "a cow and a drink," and the cow was stolen while the vendor was imbibing the drink. In Quebec and Ontario were to be found great cities with universities, medical schools, and hospitals which might be envied even here. But he had to couple with this toast the name of Professor Hingston, of Montreal, a man who had received every honor that his townsfolk in Montreal could confer upon him. He had been Mayor, and had presided with conspicuous ability over their great sanitary organization, and in asking the members to drink to the Colonial Branches, with the name of Professor Hingston coupled with them, he felt he was asking them to drink to the health of one who was in every way calculated to do honor to the profession, and to ably represent his fellow-citizens.

The toast having being duly honored,

Professor Hingston, in reply, said he was deeply sensible of the honor of having his name associated with so important a toast, and of the kind and graceful way in which Mr. Hart had proposed it. The rising of the branches in Canada seemed to have been only the work of a moment, and it was mainly the work of one man. Mr. Hart came to them from the Pacific coast. He sent letters in advance over all the country. The profession everywhere assembled to receive him, and branches were created in all the important towns in Canada. They were formed as quick as beacon fires on Welsh or Scotch hills in times past. They all in Canada desired to be in closer touch with the parent Association. For himself, he was under the deep debt of obligation to the Association for the honor they had done him in asking him to give an address before it. Six years ago he had come to this country, and at Brighton very quietly took his place, and at the end of the meeting Sir Walter Foster moved that the rules be suspended in order that he (Professor Hingston) might be created an honorary member of the Association, and from that moment to the present he had met with the most genial kindness. The recollection of the cordiality with which he had been received in Nottingham would never fade from his memory; and if he could convey to his professional brethren in Canada a little of what he felt, he knew he should be doing them and the Association no harm. He felt that night a little in a pro-

phetic vein. Six years ago the British Association for the Advancement of Science did Canada and Montreal the honor of coming to hold their meeting there, and he trusted that at no very distant date the British Medical Association would see their way to paying Canada a visit. They would there find a heterogeneous population—French, English, Scotch, and Irish—but amongst them all an intense love of British institutions and a very deep attachment to Her Most Gracious Majesty Queen Victoria; and if the Association could do them the honor he suggested, he could assure for the members a most cordial and hearty welcome.—*British Medical Journal.*

CONCERNING THE ETIOLOGY OF PUERPERAL ECLAMPSIA.—Gerdes (*Münchener Medizinische Wochenschrift*, May 3rd, 1892) refers to a case of severe puerperal eclampsia investigated by him, after death, in which a peculiar bacterium was obtained. On autopsy, there was observed in both kidneys a marked parenchymatous change. The liver was dotted throughout with countless hemorrhages the size of hemp seed. Similar hemorrhagic exudates were found in the mucous membrane of the digestive and respiratory tracts in connection with intense, acute inflammation. Local circumscribed hemorrhages were also found in the pia mater. The kidney, liver, lung, and some blood from the aorta were removed and placed upon sterilized plates, and from the colonies of bacteria which developed upon all the plates in large numbers the investigations were made. Upon the plates these colonies had a light speckled, bluish-white, or light brown appearance, and possessed a number of knobbed prominences which rendered their contour indistinct. The deeper colonies were smaller, occasionally round or lance-shaped. Inoculated gelatin tubes were liquefied in five days. In agar streak cultures a gray-white, clay-colored pellicle was formed in twenty-four hours in the incubator, which quickly covered the surface of the agar as a smeary layer. The culture consisted of short bacilli, resembling in morphology and color those of chicken cholera, hog plague, and rabbit septicæmia. They were stained with difficulty in alcoholic or watery solutions of the aniline colors; indifferently by heating for a long time in a strongly alkaline methylene-blue solution. Best stained by long exposure in weak aniline-water gentian-violet solution. In hanging drops the bacillus showed a peculiar lively movement. Gerdes found the bacillus in the capillaries and punctate hemorrhages in liver and lungs, and in the lumen of the tubules of the kidney and inside the capsules of the glomeruli. The bacillus measured 1-3 *m* in length and ½ *m* in thickness. Upon mice, subcutaneous injection of a $\frac{1}{10}$ ccm. of a 15-hour old bouillon culture produced almost immediately vomiting movements, convulsions, and torpor, out of which they awoke after a short time, but to show evidences of great exhaustion, which increased until death took place from respiratory failure. In rats, no convulsions were observed; they evidenced great exhaustion, and finally unconsciousness and death, with failure of respiration and fall of temperature. Rabbits, marmots, and guinea pigs were only affected by the intravenous injection of large doses; in the latter convulsions were observed. It is Gerdes' belief that all fatal cases of eclampsia which show upon autopsy marked changes in the liver and kidneys are dependent upon an infectious cause. It is irrelevant if eclampsia be limited by this standpoint of our knowledge of the disease, or if we consider an infectious form of the disease. A definite judgment can only be won when the bacteriological find shall be confirmed upon the living subject.—*University Medical Magazine.*

PUERPERAL TETANUS.—In the *Archives de Tocologie*, 1892, No. 3, Vinay reports the case of a multipara, aged thirty-six years, who suffered from abortion during the second month of her fourth pregnancy. She had hemorrhage for several days, and did not know the exact time of the abortion. No interference was practised at the time; the lochia shortly afterward became foul, and the uterus was curetted under chloroform anæsthesia. Portions of retained membrane, decomposed, were removed, and an hour afterward the patient had a violent chill. The second day after the curetting she suffered from pain in the masseter muscles; trismus and spasms of the pharynx with difficult deglutition soon followed. The general symptoms of tetanus rapidly supervened. The pulse was 108, the temperature $98\frac{5}{10}°$. Thirty-six hours

after the appearance of the first symptoms the patient died. No autopsy was obtainable. Vinay has collected 106 cases; 47 of these occurred after abortion, 59 after parturition at term. The first three months of pregnancy is the most susceptible period, and the patient during the first half of pregnancy is in much greater danger of tetanus than subsequently. Tetanus most frequently follows some minor manipulation, and hence comparatively few of the cases occur in maternity hospitals, as most of them are treated at their homes. Artificial delivery occurred in most instrumental cases, and next in frequency was the use of the tampon; the forceps and version do not predispose to tetanus, while Vinay could find but one case of craniotomy so complicated, and but one case of Cæsarean section. Multiparas above the average age are most often attacked. The most important influence in predisposing to tetanus is the wretched surroundings of patients who suffer from it, and especially living in damp and squalid lodgings. There seems reason to believe that trismus may be conveyed by contagion, as in a case reported at Henricius. Amon also reports a case of artificial delivery of a placenta where he seemed to convey the poison of tetanus from the wounded hand of the husband, which he had dressed, to the mother's uterus. Tetanus is also most frequent in the tropics, where the condition of the soil seems favorable for the development of telluric bacteria. Puerperal tetanus usually develops during the first week after labor, and becomes acute or chronic. The prognosis is doubtful, and usually hopeless. Out of 106 cases, 94 proved fatal, a mortality of $88\frac{67}{100}$ per cent. The mortality of abortion complicated by tetanus is 1 per cent. greater than that of labor at term under similar circumstances. The diagnosis may be doubtful in cases of severe hysteria; in prophylaxis, the employment of antiseptics and the precaution that a physician attending a tetanus patient should not attend confinement cases will be sufficient. The treatment consists in antisepticizing thoroughly the genital tract, and in the employment of sedatives. Prophylactic inoculations with cultures of the bacillus of tetanus have not yet been extensively employed. —*Amer. Jour. of the Med. Sciences.*

PROFESSOR OSLER ON SPECIALISTS.—Professor Osler, of the Johns Hopkins University, in his address before the recent meeting of the American Pædiatric Society at Boston, made some thoughtful remarks concerning the true basis of specialized medicine. Dr. Osler believes heartily in the specialist who builds up his specialty on the firm basis of a general knowledge of the healing art. His study of medical history shows him that our art began with specialists. The *Papyros Ebers* is largely taken up with specialized practice; and centuries later we find Aristophanes satirizing the rectum specialist of his day in a way not unlike that our comic papers when they wish to joke about an oculist or aurist of the present day. So that, as Osler wittily remarks, "the tail of the serpent emblematic of medicine is correctly figured as having been returned to his mouth: at no age of the world has specialism been so rife."

But Dr. Osler does not love all who "do special work"; he contemns utterly the ready-made variety of specialists. He regards the latter as an actual detriment to the profession. He says: "A serious danger is the attempt to manufacture rapidly a highly complex structure from ill-seasoned material. The more speedy success that often comes from the cultivation of a specialty is a strong incentive to young men to adopt early a particular line of work. How infrequently are we consulted by sucklings in our ranks as to the most likely branch in which to succeed, or a student, with the brazen assurance that only ignorance can give, announces that he intends to be a gynæcologist or an oculist! No more dangerous members of our profession exist that those born in it, so to speak, as specialists. Without any broad foundation in physiology or pathology, ignorant of the great processes of disease, no amount of technical skill can hide from the keen eyes of colleagues defects that too often require the arts of the charlatan to hide from the public."

If Dr. Osler's way and the rule by which he has guided his own course could have sway, every specialist would be a classical scholar as well as a thorough all-round physician and surgeon before he considered himself in a position to make a judicious choice as to the special line of practice best suited to his tastes and capacity.—*N. Y. Medical Journal.*

AN EXHIBIT OF ROAD-MAKING AT THE COLUMBIAN EXPOSITION.—Colonel Albert A. Pope, of Boston, is earnestly endeavoring to secure "a comprehensive exhibit of roads, their construction and maintenance, at the World's Columbian Exposition." It has been alleged that bicycle manufacturers have a keen business interest in the matter, and it is doubtless true that good roads will help the bicycle business. So will they help every other business. No class of men can have a greater interest in this question than physicians. To the discomforts and trials of a life not too full of sweetness, the wretched condition of city streets and country roads adds its full quota. Americans do many things well and a few things badly; and among the things that they do worst is road-making. If Colonel Pope can succeed in his effort to have at the Columbian Exposition an educational exhibit that shall attract prominent attention, and shall show what has been done elsewhere and what can be done in this country to secure good roads, he will have performed a substantial public service.—*Medical News.*

CHLORALAMIDE FOR SEASICKNESS.—Professor Charteris, who holds the chair of therapeutics and materia medica at the University of Glasgow, has recently advised the treatment of seasickness by means of "chlorobrom," or a mixture of equal parts of chloralamide and potassium bromide in solution. An adult takes thirty grains of each of those drugs in an ounce of water or other liquid; that is to say, sixty grains of the so-called "chlorobrom" may be considered a full dose. Dr. Charteris' letter may be seen in the *British Medical Journal* for June 18th, and it contains some details of clinical experiment with the drug and his summary of conclusions. He concludes that the drug is peculiarly free from objections, is absolutely harmless, and will alleviate seasickness when it does not prevent it wholly. The effect is produced, of course, by inducing sleep. The patient should cleanse the *prima viæ* before the day of sailing arrives. The "chlorobrom" should be taken an hour or two before rough water is reached, and the patient should then lie down and close his eyes. Sleep of a refreshing and agreeable quality may be expected, lasting from six to eight hours. One patient, who was awakened by the violent tossing of the steamer, stated that in the night, when he was aroused so far as to notice the motion, the rocking of the vessel produced only pleasurable sensations.

In a recent number of the *Brooklyn Medical Journal*, there appeared a study of two hundred and eighty cases treated by chloralamide, by Dr. James Wood. The writer offers the following as a palatable hypnotic combination, suitable for use in private practice: Chloralamide, two drachms; compound tincture of cardamom, an ounce. These should be mixed well, and half an ounce each of syrup of orange peel and syrup of raspberry added. The dose is from a dessertspoonful to a tablespoonful, repeated if necessary. The larger dose above mentioned represents thirty grains of the drug, while forty grains may be considered as "the best hypnotic dose for an adult." The best time for taking the full dose is just before going to bed. The sequels of such dosage are not disquieting, and no centric symptoms of any moment have been noticed. The drug should not be used in a larger quantity than a hundred grains in a day, and then only under observation.—*N. Y. Medical Journal.*

ACTÆA RACEMOSA IN DYSMENORRHŒA AND OVARIAN IRRITATION. — Mr. James Brunton uses this remedy in twenty to thirtv minim doses, thrice daily, for four days previous to the usual time of the appearance of the flow. It is supposed to have an anodyne action upon the dysmenorrhœa, whether of uterine or ovarian origin, and in certain cases of metrorrhagia it can replace ergot to advantage. In amenorrhœa of early girlhood, it is of benefit when combined with iron. As an anodyne, it can replace the bromides and opiates. In menorrhagia and metrorrhagia it is beneficial as a regulating agent, although at times it is disappointing.—*The Practitioner.*

THE following appointments have been made on the staff of the Woman's Medical College: Dr. F. Cane, Lecturer on Mental Diseases; Dr. G. Gordon, Lecturer on Sanitary Science; Dr. S. Boyle, Lecturer on Histology; Dr. J. Gray, Assistant-Lecturer on Anatomy.

THE
Canadian Practitioner.

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, SEPTEMBER 1, 1892.

MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The British Medical Association is now sixty years old, and its success has surpassed anything that the medical world has seen in connection with similar societies. The meeting this year was held at Nottingham, July 26th to 29th inclusive, and from a scientific point of view was all that could be desired. The *British Medical Journal* thinks it doubtful whether the scientific and progressive side of clinical medicine, surgery, and pathological research have ever been so strongly represented at any national congress, either in subjects or in representative men.

Mr. Joseph White, the president, in his address, gave some interesting facts connected with the history of the Association. He was secretary at a former meeting held in Nottingham in 1857, when there were between eighty and ninety in attendance. The Association was then twenty-five years old, and numbered 2,065; now it numbers over 14,000. The founder of the Association was Sir Charles Hastings, who met a number of his confrères in the board room of the Worcester Infirmary in 1832. The result of this meeting was the inauguration of the Provincial Medical and Surgical Association, which did good work for over twenty years. In 1855 it was felt that the influence of the Association should no longer be confined to provincial limits, and after careful consideration the title was changed to the "British Medical Association." The following year the meeting was held in Edinburgh, under the presidency of Professor Allison. In 1862 the annual meeting was held in London, and in 1867 the first meeting was held in Dublin.

During the meeting of 1857, in Nottingham, all the sessions were held in one small room, known as the assembly room. During the Dublin meeting, in 1867, it was found that the work had increased to such an extent that it was necessary to divide into sections. From year to year since that time the sections have increased in number and in the amount and importance of their work.

The financial statement shows a very happy condition of things. There is a total balance of £45,199 at the credit of the Association. Dr. Withers Moore gave some indication of the use to be made of the handsome surplus. He stated that it was probable that when the time of the lease of their present premises had expired they would be able to spend from £50,000 to £60,000 upon the purchase of a site and the erection thereon of suitable buildings for the purposes of the Association.

The meeting of 1893 will be held in Newcastle-upon-Tyne, under the presidency of Dr. Philipson. The invitation from the profession of Newcastle was backed up by the municipality of the town and by the University of Durham.

UNIVERSITY AND SCHOOL REPRESENTATION IN THE COUNCIL.

We publish with pleasure, in this issue, a letter from Dr. John H. Sangster, who discusses the relationship existing between the Medical Council and the universities and schools. We must confess that we are much surprised at some of his statements, and desire to refer briefly to two:

(1) He says the universities did not expect any consideration for giving up certain of their powers. As he was a member of the Senate of Victoria when the Council came into existence, he is of course in a position to know something about that university. However, it happens that a goodly portion of the Victoria Senate (probably a large majority) either took no interest in the establishment of the Medical Council, or were decidedly opposed to it. Under such circumstances, it may be true that their rights in connection with the College of Physicians were not discussed. However, we are in

a position to state positively that the promoters of the bill which created the Council, including such men as Dr. H. H. Wright, Dr. W. T. Aikins, of Toronto, the late Dr. Dickson and Dr. Lavell, of Kingston, and others, did most distinctly understand that their schools and universities were to be entitled to representation in the Council; otherwise they would under no circumstances have consented to the passage of the bill.

(2) He says the universities never had any licensing powers to give up. In a sense he is right, as the degrees were not licenses, but those holding the degrees could get the licenses simply on making application and paying the required fee of four dollars each. The Toronto school also had the right to issue certificates of competency to practise medicine, and those who held such certificates were entitled to licenses on making application in the same way. The Toronto School of Medicine and the universities, therefore, did surrender some of their powers when the Central Examining Board was established, and this must always be considered when radical amendments to the Medical Act are proposed.

As we have before stated, we are to a certain extent in sympathy with Dr. Sangster's views apart from those expressed in the letter; but while we think certain changes are absolutely required, we do not consider it wise to close our eyes to the serious difficulties in the way. Dr. Sangster disliked any interference with his own vested rights as a practitioner of medicine before the formation of the Council. Why will he not show some consideration for the universities and corporations, which undoubtedly had certain powers and rights which they do not now possess? There are some other aspects of the school and university question to which we will refer at a future time.

CANADA'S REPRESENTATIVE AT THE MEETING OF THE BRITISH MEDICAL ASSOCIATION.

The choice of Dr. Hingston, of Montreal, to deliver the address on surgery at the Nottingham meeting, as a representative of our Dominion, was in all respects a happy one. Apart from his surgical skill and experience, which are so well known at home and abroad, he has a fine presence, and is an exceedingly good speaker. Mr. Lawson Tait paid him a very pretty compliment at the banquet given by the profession of Montreal to the members of the Canadian Medical Association, in 1884, when he said that Dr. Hingston, while speaking, reminded him of England's silvery-tongued Paget. Mr. Tait's first experience of Dr. Hingston's powers as a speaker was at the regular session of the meeting of the Association, when the latter, in criticizing the able address of the former on abdominal surgery, entered a dignified but emphatic protest against the indiscriminate mutilations of women by removing the uterine appendages. At the same meeting these two champions had several "spars," which, however, only resulted in a friendship which is not only strong, but likely to endure.

As the *Journal* expresses it: "For the first time in the history of the Association, one of the addresses to the general meeting has this year been delivered by a colonial member of the British Medical Association. Professor Flint and Professor Gross have been heard as representatives of our American colleagues, and it was only right that the first opportunity should be taken to ask a representative of one of the many colonial branches which have recently been called into existence to become a spokesman of the science and practise of our art in Greater Britain."

We desire to extend our hearty congratulations to Dr. Hingston on the great ability he displayed in his address, and on the magnificent reception he received in the old land. The honors which have been heaped upon him by those we respect so highly as that grandest of all medical societies will be highly appreciated by his numerous friends in all parts of this great Dominion, which he has so worthily represented

THE "BRITISH MEDICAL JOURNAL"

The success of the *British Medical Journal* has been almost phenomenal. Dr. Withers Moore, the past-president of the Association, recently expressed the opinion that such success was largely due to the management of the able editor, Mr. Ernest Hart, who, he said, had

brought *The Journal* to such a pitch of excellence that it was a sort of model journal for all the medical journals throughout the world. The staff is a large one, and includes Dr. Dawson Williams, who is an able assistant to Mr. Hart. Mr. Fowke, the general secretary, is said to have great business and executive capacity. The revenue from advertising during the last year was $70,000, a very respectable sum, and quite an assistance to a journal of any description. In addition, the sums received for subscriptions and sales of *Journals* amounted in the aggregate to over $80,000 during the year. The total annual revenue is now about $155,000.

Correspondence.

SWISS HEALTH RESORTS.

Editor of THE CANADIAN PRACTITIONER:

DEAR SIR,—It occurred to me that a few lines on Switzerland and a brief description of some of its far-famed health resorts might be of interest to your readers.

Geneva ought to be, as it is, one of the healthiest cities in the world. There is an inexhaustible supply of pure water in the immediate neighborhood, and the swift-flowing Rhone carries all impurities rapidly away. The city is abundantly supplied with drains, which connect with two large trunk sewers, one on each side of the river. These empty into the bed of the Rhone some distance below. Then the high winds from the mountains, the "bise," which are frequently prevalent, although severe on the lungs, are of great benefit in carrying away atmospheric impurities.

The University of Geneva has had for so many years a world-wide reputation that it is not necessary for me to enter into any lengthened account of it. The botanical gardens, founded by De Condolle, are in close proximity to the university. They are extensive and well arranged for study. There is a very complete collection of Alpine plants in a separate enclosure. Is it not time that similar gardens were instituted in connection with our own university?

In the medical department the subjects of anatomy, physiology, and pathology are taught in a large modern building situated almost in the suburbs, whereas instruction in the final branches is given in the hospital, quite on the other side of the city. The distance between the two buildings is over a mile. An appropriation has recently been made for the building of a pathological laboratory in the immediate neighborhood of the hospital. The pathological museum is not large, but the specimens have been mounted with great care and are well arranged. It was founded by the present professor, Dr. Zahn, sixteen years ago. It contains a few very interesting specimens; one, a heart with a permanent foramen ovale which is obstructed by a large thrombus. Another, a case of multilocular hydatid cyst of the liver, etc. The Cantonal Hospital contains three hundred beds, and in it the clinical teaching is excellent.

The medical students of Geneva, about two hundred and forty in number, are largely drawn from the eastern countries of Europe, Roumania, Servia, Russia, Turkey, etc.

As in other European institutions, the medical faculty is an integral part of the university, and receives appropriations from the state in the same way as the other faculties.

Having determined to see a few of the health resorts of Switzerland, particularly those of high altitudes, now so much renowned for the treatment of tuberculosis, I made my first visit to Montreux and Les Avants.

Montreux, situated on the north shore of Lake Geneva, near its eastern extremity, has long been a resort for consumptives. The winter is mild, partly on account of the latitude and partly on account of its sheltered position. Facing the south, it is protected on the north and east by high mountains. For the last three years the fogs on the lake in the winter have been so dense and so long-continued that Montreux is not so much frequented as formerly. In the spring, however, a large number of tubercular patients go there to escape the unfavorable weather which exists in the mountain resorts during the melting of the snow.

From Montreux I ascended to Glion (2,200 feet above the sea) by a cable railway. I do not know at what angle the road is built, but making the ascent seemed very much like climbing the side of a house. From Glion, in which there are two or three large hotels, I

walked to Les Avants, first through orchards, and then through a thickly-wooded gorge. The views of the lake and the mountains were in places indescribably beautiful. The Hotel Les Avants is situated on a plateau over 3,000 feet above the sea, and protected on three sides, north, east, and west, by mountain peaks which rise several hundred feet above it. The south, that towards Montreux and Lake Geneva, is the only side exposed. It is thus protected from the north, east, and west winds, and, owing to its altitude, is not subject to fogs. In fact, the amount of sunshine during the year compares favorably with Davos and other resorts in the Engadine.

Although the Hotel Les Avants is filled during the summer by patients and tourists, it is principally as a winter resort that it has become famous. Its advantages are pureness and dryness of the air, the almost complete absence of high winds, and the abundance of sunshine. In the early spring months, while on the north side of the hotel in the shade the thermometer may register several degrees of frost, in the sun it may register 70 or 80 degrees. Sun-boxes, about twice the size of sentry-boxes, are quite an institution at Les Avants. In these, patients, while sheltered from the wind, may remain in the sunshine several hours each day. Tobogganing and skating are much enjoyed in the winter time.

The class of cases to which Les Avants is best suited are patients with tuberculosis in its very earliest stages, convalescents, and those suffering from anæmia and nervous debility. On account of the great majority of patients suffering from diseases of a curable character, there is an air of brightness and hopefulness about the place which is of great advantage to one in the earlier stages of phthisis.

Leaving Montreux by the train, and ascending the Rhone valley, Aigle is reached in less than an hour's time. Above Aigle there is a consumption cure, Leysin, which is every year becoming more noted. The average sunshine there in the winter of 1887 was much greater than at Davos. I shall probably visit Leysin before I leave Switzerland.

Ascending the Rhone valley still further by train, we arrive at Leuk, above which are the famous hot sulphur baths of Leukerbad. These I think I described in a former letter from Switzerland.

In making the journey from Geneva to Davos by train, there is nothing to note until one passes along the shore of the Wallensee. Here the scenery is equal to any in Europe. On the opposite side of the lake, the rocks rise almost perpendicularly out of the water to the height of a thousand feet or more. After leaving the Wallensee and passing up the valley of the Rhine, Landquart is reached, and from there a road branches off to Klosteos and Davos. The entrance to the valley leading to Klosteos is guarded by almost perpendicular walls of granite, which rise to a great height. The ascent from Klosteos to Davos is very steep.

The Davos valley, 5,200 feet above the sea, runs from northeast to southwest, and is protected on each side by mountains thickly wooded at the base, which rise from two to three thousand feet above the town.

There are two distinct centres of population in the valley, Davos Dorfli and Davos Platz. The latter is altogether the most important, as nearly all the large hotels and pensions are situated there. The native population of the valley amounts to between three and four thousand, while the number of patients varies from about five hundred in the summer to fifteen or sixteen hundred in the winter. There are many very handsome hotels, which have every convenience for guests. The streets are well paved, and the town has good drainage and an excellent water supply. Several churches, concert halls, a very pretty theatre, and streets lighted by electricity give Davos the appearance of a miniature city.

The principal features of the climate are the rarity, purity, and dryness of the air, the freedom from winds, especially in winter time, and the large amount of sunshine.

"In midwinter the snow lies dry and powdery on the ground, whilst the radiating solar thermometer marks from 110° to 130° F., and at the same time the temperature of the air in the shade is perhaps 10° F. below freezing point; and, notwithstanding this low temperature of the air, one sits out of doors without an overcoat, barely supporting the heat of the sun. The explanation of this seeming paradox is not

far to seek. The pure, clear, thin air facilitates radiation just as it permits the transmission of the sun's rays without intercepting them. The white snow reflects the heat rather than absorbs it, and, owing to the great dryness of the atmosphere, the little snow that does melt is instantly taken up in the air as vapor" (Dr. Huggard). In the winter the ordinary north-east wind of Switzerland, the "bise," is scarcely known in Davos. In the summer a local breeze is produced by the snow on the neighboring mountain peaks. This has rather a beneficial effect in cooling the air. The south winds are occasionally experienced, and always have a bad effect on the health of the patients. The average amount of sunshine in Davos is very great, but it must be remembered that there, as in other parts of the world, some winters are much more favorable than others.

In sending patients to Davos, two points ought to be remembered: first, that the air is cold, dry, and stimulating; and, secondly, that it is much lighter than at the seashore, the barometer standing at between 24 and 25 inches. It is therefore necessary that the patient should have a considerable amount of reserve force to withstand the extra strain. The class of phthisical cases which receive the most benefit are those in the earlier stages, in whom the organs other than the lungs are in a healthy condition, and in whom the sound lung tissue remaining is sufficient to perform efficiently the respiratory function under such changed circumstances.

It is difficult to draw the line between those who should be sent to a mountain resort and those who should remain away, as we can never accurately gauge the vital force present. I think also that advanced cases often do badly at high altitudes, because they take too much exercise at first.

Patients suffering from chronic bronchial catarrh in the earlier stages, "remainders of pleurisy," nervous asthma, and general debility are also said to do well at Davos.

The patients come from every quarter of the globe. A very large proportion—between four and five hundred—from England reside at Davos during the winter. It is stated that soon after arriving the patients become so ruddy and sunburnt that they are not easily distinguished from those in health. That is, no doubt, often the case, but it does not exactly accord with my brief observations. It was sad to see so many emaciated forms, some with pale faces and others with flushed cheeks, as they entered the concert hall and took their places at the different tables. Men who no doubt were leaders in their various callings here appear as so many wrecks. Further, when one thinks that the great majority of them will in two or three years have disappeared from the face of the earth, one is impressed with the destructiveness of this dreaded disease.

In those cases which do well at Davos the change for the better is quite rapid; the fever lessens and is soon absent, appetite and strength return, and the bacilli are diminished in number or altogether disappear from the sputa.

It is surprising that among the laity there should now exist such extreme notions of the contagiousness of tuberculosis. A few days before leaving for Davos a French lady, upon hearing that I intended to go there, exclaimed: "Why, you run great risk of taking the disease! Davos is infested with the 'insects.'" I made many inquiries on this point, and found that there were only a few cases of what appeared to be undoubted contagion. One, a child of five or six years of age, a native of Davos, and with no history of hereditary taint, was in the habit of playing for hours together with a patient in an advanced stage of the disease. This child afterwards died of miliary tuberculosis. Another, a servant girl, also a native of Davos and without hereditary taint, was in the habit of washing the pocket handkerchiefs of tuberculous patients and allowing them to dry in her sleeping apartment. She also became tuberculous.

Such cases will occur anywhere, but they demonstrate the fact that the disease is contagious in high altitudes as well as on the seashore, and that most stringent sanitary precautions ought to be taken when such a number of patients live so near together.

It may be safely said, however, that there is really no increase of the disease among the natives of the valley except these three or four cases mentioned. The form of medical treatment most largely adopted is creosote, usually given by the stomach. It is especially useful

in cases of fever resulting from the absorption of pus products, and seems to have a better and more rapid effect when given by hypodermic injection. The latter process is so painful that patients object to its continued use.

Cod liver oil seems to be used to a very small extent—not at all by some physicians.

Koch's treatment had a thorough trial, and is now almost completely given up. One physician of large experience assured me that in a few incipient cases a complete cure, he thought, was brought about by the use of the lymph. The results, however, in many cases were so disastrous that the remedy was discontinued.

The modified lymph of Klebs is now used to a limited extent. It does not produce any febrile reaction, but it is doubtful if it exerts any influence whatever on the disease.

I was very much interested in the open-air treatment as it is conducted by Dr. Turban. Its main features, similar to those of Dr. Detweiler's at Falkenstein, are rest, fresh air, and feeding.

The sanatorium, accommodating about 60 patients, is so constructed that every bedroom has a southern aspect. A deep verandah runs along the whole front of the building, and is provided with curtains to be used in unfavorable weather. Electric lights are also placed on the verandah, so that it can be lighted in the long evenings of winter. The patients are placed under a strict regimen as to food, sleep, and exercise. The food is of a most nourishing and easily digested character. Milk is given in large quantities to all who can digest it. The patients take their principal meals in a large, airy dining hall, and, besides these, food is given at stated times on the verandah. There they exercise from a half to three hours each day, according to their strength. This consists of first walking on the level ground; then, when the patient becomes stronger, of making gentle ascents. They are allowed eight hours' sleep. The bedroom windows are kept constantly open. Each patient who is strong enough receives a douche bath, followed by gentle massage. The douche varies in force and temperature in each case, according to the strength. The remainder, of the day, from eight to ten hours, is spent lying down on the verandah. Here they read, write, or amuse themselves in any possible way.

It will be thus seen that the patients live almost all the time, summer and winter, in the open air. The stillness of the atmosphere favors this form of treatment in the winter at Davos.

Dr. Turban takes cases in any stage of the disease, and claims that about forty per cent. leave apparently cured. The institution has been but three years in existence, so that reliable statistics cannot yet be made. Creosote is given in some cases, and other medicines for such symptoms as may arise. Lung gymnastics are adopted for those patients in whom the disease is in a latent condition; never when any activity is shown.

The doctor informed me that the strict regimen was repugnant to English patients, and that they seldom came under his care.

Now with regard to general results. There have been some very remarkable cures, and the benefit experienced by a very large number of patients appear to establish the reputation of Davos as one of the best resorts for consumptives in Europe. The people seem to have great faith in the future of the town, as many new buildings are in course of erection. This may, however, be overdone. It has been clearly proved by statistics that tuberculosis is more frequent in proportion to the population in crowded cities than in sparsely settled districts, and it is possible that, every precaution being taken, the crowding together of such a number of patients may of itself have a deleterious effect. It must be here stated that at Reichen Hall there are a much larger number of patients, and the effects are good. After all, in a review of the various health resorts, one is convinced that the essential point of the treatment is to place the patient in such a position that he can breathe pure fresh air at all times, *i.e.*, air comparatively free from microbes, and that he can at the same time have sufficient exercise to so improve digestion and nutrition that the tissue cells can the better withstand the onsets of the bacilli. These conditions are found on the mountain as well as at the seashore or on the prairie. The peculiarities, however, of each place are found suitable for the varying conditions of the individual and the disease. It is therefore a study in itself, and one to which too little attention is given to

select the proper place for each individual patient.

There are a number of other resorts in the neighborhood of Davos; Wiesen, Seewis, also St. Monitz, much further south, none of which I had time to visit.

On my return I paid a short visit to Rogatz and Pfœfers. This is one of the oldest watering places of Switzerland. The hotel at the spring was built in 1704. The water is of a slightly gaseous-saline character, and has a temperature at its source of 110° F. It would be quite worth one's while to go to Switzerland for the sole purpose of seeing Pfœfers.

The walk from Rogatz through the deep gorge, at the bottom of which rushes the Samma River, the old-fashioned hotel with its vaulted rooms and quaint old pump-room, the cavern out of which the mineral water flows, all produce an impression not easily forgotten.

The water is conducted from Pfœfers to Rogatz through a large metal tube, so that the principal establishment is now at the latter place.

The class of patients at Pfœfers-Rogatz are dyspeptics, those suffering from chronic rheumatism, gout, anæmia, and nervous debility. For most cases of the latter disease, I would certainly recommend Rogatz rather than such high altitudes as Davos.

Yours very truly,

J. E. GRAHAM.

Geneva, July 27th, 1892.

Editor of THE CANADIAN PRACTITIONER:

SIR,—My attention has been called to an editorial in the last issue of your journal in which, while wisely urging very organic changes in the constitution of the Medical Council, and frankly conceding the point that our professional executive must be elective, and essentially, if not exclusively, within our reach and under our control, as in all other incorporated bodies, you proceed, in a half-hearted way, to plead for a continuance therein of a reduced representation of "school men." Your advocacy of the retention of that element in the Council is based on two grounds. First, that a relatively small university representation could not injure the profession, and might be of service in matters relating to curriculum; and, secondly, that in this connection the universities possess vested rights which cannot be ignored, that "when the College of Physicians and Surgeons was organized they gave up their licensing powers with the distinct understanding that in consequence thereof they would have representation in that body." Permit me to challenge both these positions; the first as simply puerile and specious, the second as a purely gratuitous assumption, without a vestige of foundation in fact, and unheard of until the exigencies of the present agitation called it into existence.

If your first contention were of any force at all, it would equally warrant the intrusion of university representatives into the governing boards of every profession and incorporation in the Dominion. We are simply determined, in future, to manage our own affairs in our own way, and we imagine ourselves to be as capable of doing so without further college tutelage or interference as are lawyers, dentists, pharmacists, and others. It may be taken for granted that the *laissez faire* system of the past, which permitted men—and not infrequently very inferior men—to seek and secure election to the Council, will no longer prevail. We have had a sufficiently nauseating experience of that mode of procedure. Hereafter the place must seek the man. In every territorial division in the province may be found a score of medical men qualified to adorn the position, men who in education and attainments and standing, in qualities of both heart and mind, may be safely trusted to act as conservators of the rights and immunities of medical practitioners, and to jealously keep the standard of professional requirements abreast of the age. The opinions and suggestions of medical professors and university dons will doubtless at all times be received by the remodelled Council with attention and respect; but seats at the Council board, with a potent voice in its discussions, and with capacity to vote on matters affecting the general profession?—Thanks! No, we have had enough of that.

Your averment that the universities hold their seats in the Council as a vested right, by way of a *quid pro quo* for powers surrendered, is a mere popular delusion. As a not inactive member of the Medical Faculty, and as a Sena-

tor of Victoria University from 1859 to 1870, the period which witnessed the inauguration and the establishment of the College of Physicians and Surgeons, I can and do most distinctly and emphatically affirm that neither directly nor indirectly, by agreement or implication, did any such understanding exist, or was any such stipulation made or mooted. Nor did the universities, as you state they did, possess any licensing powers to give up. The earliest Act in Upper Canada relating to medicine was passed in 1815, and was repealed as impracticable in 1818 by 59 Geo. III., c. 13, which established a Medical Board of five persons to grant licenses to practise medicine, etc., and which specially provided that "persons duly authorized by any university in His Majesty's dominions, or by commission or by warrant in His Majesty's military or naval services, shall not be restrained from practising for want of such license." The Act of 1827, 8 Geo. IV., c. 3, repealed this clause and gave the Governor permissive power to grant a license to practise to persons holding university diplomas, certificates of qualification from the Medical Board, warrants or commissions as surgeons, etc. Under this Act, which with trifling modifications remained in force till the Council was established, the only persons who could practise in this province without the Governor's license were members of the Medical Board and warranted and commissioned surgeons actually engaged in His Majesty's service. Thus it was only for the nine years intervening between 1818 and 1827 that university degrees in medicine were a legal authorization to practise. It is true that the presentation of the university diploma, certificate, warrant, or commission, with the fee of $4 for the license, was but little more than an empty form; but the requirement to do so marks the fact that the state reserved to itself the exclusive right of licensing to practise medicine in Upper Canada, and in reserving this power or right it unquestionably also reserved the right to invest it with such conditions and requirements as the public service might require. In 1865 the power of giving legal effect to university diplomas and other qualifications was removed from the Governor-General and vested in the newly-formed Medical Council, which was constituted essentially as it exists to-day, except that it contained no homœopathic representation. In 1869 the Medical Council was empowered to appoint a Central Board of Examiners, and to refuse registration even to the holders of university degrees in medicine unless they had also passed before this board. As a *quid pro quo*, homœopaths and eclectics, who were then brought in, were given representation in the Council, and each teaching body was given the right to appoint one examiner on the board; but the universities and colleges acquired no other new rights in lieu of powers surrendered, because, in the first place, they surrendered no powers or privileges, and, in the second, their seats at the Council, which it is now claimed they got by way of a compromise, they had already held for three or four years, and were secured to them by the Act of 1865. To say, therefore, that the colleges were asked to become consenting parties to the Act of 1869, or that that Act was *ultra vires* of the Ontario Legislature, or that they received their seats at the Council by way of a *quid pro quo*, is childish in the extreme. I repeat that no pretence was then made that the universities had surrendered any powers or that they had been asked to surrender any power. The seats in the Council were accepted and held by the universities and schools as of the pure bounty and grace of the Legislature, which has to-day the same power to withdraw that it then had to bestow. It is purely a question, not of right, but of privilege, and, as I have elsewhere pointed out, however long it may have been retained, a privilege which is founded on injustice and liable to abuse is not a vested right to be preserved, but a crying wrong to be remedied.

In the irrepressible conflict which has arisen between the Council and the profession, there can be no question as to the ultimate result. The universities can, however, smooth the way for us materially by acting as we think sound wisdom would dictate. The retention of their seats in the Council is to them a matter of mere sentiment; their loss would result to them in no injury. It appears to me that they could *voluntarily* withdraw therefrom with dignity and honor. Though only now first distinctly assailed, their position in the Council really first became untenable as far back as

1874, when their appointees were so ill-advised as to become parties to taxing a profession they did not and do not in any sense represent.

JOHN H. SANGSTER.

Port Perry, Aug. 11th, 1892.

Book Reviews.

A New Pronouncing Dictionary of Medicine, being a voluminous and exhaustive handbook of medical and scientific terminology with phonetic pronunciation, accentuation, etymology, etc. By John M Keating, M.D., LL.D., formerly visiting obstetrician to the Philadelphia Hospital, and lecturer in the diseases of women and children; consulting physician for the diseases of women, St. Agnes' Hospital; gynecologist to St. Joseph's Hospital; editor "Cyclopædia of the Diseases of Children," etc.; and Henry Hamilton, author of "A New Translation of Virgil's Æneid," co-author of "Saunders' Medical Lexicon," etc.; with the collaboration of J. Chalmers DaCosta, M.D., and Frederick A. Packard, M.D. Price $5.00, cloth; $6.00, sheep. W. B. Saunders, 913 Walnut street, Philadelphia, 1892. Toronto: J. A. Carveth & Co.

This is, in the first place, a very good medical dictionary, in the sense that it gives very clear and concise definitions of medical words and phrases; but it is, at the same time, an excellent pronouncing dictionary. It was no easy task to prepare such a work, and the authors were evidently impressed with the difficulties in their way. They consulted the professors in classics in such universities as Johns Hopkins, Harvard, Pennsylvania, Amherst, Princeton, Cornell, etc, and have given extracts from their replies. In referring to such replies in the introductory chapter, the authors say: "We have abundance of authority for the statement that when we introduce into our language scientific words of foreign origin we may adopt them as our own, and naturalize them under the customary rules of pronunciation; but that with the closer intercourse of the medical profession thoughout the world and the preponderating influence of the Roman pronunciation, we believe the custom will soon make its adoption universal."

Obituary.

DR. WILLIAM H. HENDERSON, Kingston, ex-President of the Ontario Medical Association, and Professor of Clinical Medicine in the medical department of Queen's University, died on Saturday evening, August 13th. The cause of death was Bright's disease of the kidneys.

Dr. Henderson was born at Kingston, Oct. 6th, 1856, and received his collegiate training in his native city, where he graduated in medicine at the head of his class in 1879. He served for one year as house surgeon of Kingston General Hospital, and then went to Europe, where he spent two years, obtaining the diploma of the Royal College of Surgeons, with special commendation from the examiners, in November, 1879. He devoted special attention to the study of practical pathology, histology, and physiology in London, Vienna, and Berlin. Shortly after his return to Canada, he was appointed Professor of Physiology in the Royal College of Physicians and Surgeons, Kingston, and at once won great favor as a careful and painstaking teacher. He was last year appointed Professor of Clinical Medicine, a position he held at the time of his death. As a member of the Board of Governors of Kingston General Hospital, he displayed great energy in carrying out many of the recent improvements in that institution. He took an active interest in the Canadian militia, and held the position of surgeon to the Prince of Wales Own Rifles, and was also chief surgeon of the Kingston and Pembroke Railway.

Dr. Henderson, although a young man, was well known among the members of the profession as a careful and enthusiastic worker. He was one of the early members of the Ontario Medical Association, and his election to the position of President of that body in 1888 was received with great favor and unanimity as a just and well-deserved recognition of his attainments. The President's address delivered by him at the meeting in June, 1889, was pronounced one of the best even given in the history of the association. His presence will be greatly missed at future meetings of the Ontario and Canadian Associations. His private practice was large and lucrative, but unfortunately for himself his goodness of heart induced him

to sacrifice himself for his patients, and his untimely death stands as a warning to all who are tempted to deny themselves a proper amount of rest from the exacting duties of the busy practitioner.

In May last Dr. Henderson first expressed himself in need of rest, and went to Old Point Comfort, Va., where he took part in the meeting of the National Association of Railway Surgeons. In his return he felt but little benefit from the trip, and unable with his accustomed regularity to attend the meeting of the Ontario Medical Association, but resumed practice in the hope that he would gradually shake off his indisposition. Unfortunately in this he was disappointed, and soon the dimness of vision and other attendant symptoms confirmed the diagnosis of Bright's disease. The course of the disease was rapid from July 26th, the date of his last professional visits, to the date of his death, August 13th. During his illness his professional confreres were unremitting in their attentions, each vieing with the other in hoping against hope that the life of one so highly esteemed might be spared to add lustre to the profession of which the deceased was such an ornament. Having settled his affairs, he calmly and patiently awaited the summons, which came at the midnight hour, when he peacefully entered into rest. Distinguished, as he always was, in life as a genial, companionable, lovable man, he greeted the grim messenger as only a Christian hero could, expressing no regret save the sorrow he felt at parting with an affectionate wife and dearly loved children. Such a life and such a death are full of useful lessons. The esteem and respect in which deceased was held were manifested in the many tributes to his memory. His funeral, one of the largest ever seen in Kingston, was a striking evidence of the affectionate regard enjoyed by Dr. Henderson in his native city.

ACROLOZONE (Harvey's) is a preparation with qualities similar to those of hydrogen peroxide. It is a powerful antiseptic, and can be used with great freedom because it is unirritating. It is said that it makes a good dressing for ulcerated surfaces, and that it is very valuable in diphtheria. It is sometimes administered in teaspoonful doses in diphtheria.

Therapeutic Notes.

TREATMENT OF APPENDICITIS.—Dr. Senn's conclusions are these, viz.: (1) All cases of catarrhal and ulcerative appendicitis should be treated by laparotomy and excision of the appendix as soon as the lesion can be recognized. (2) Excision of the appendix in cases of simple, uncomplicated appendicitis is one of the easiest and safest of all intra-abdominal operations. (3) Excisions of the appendix in cases of appendicitis before perforation has occurred is both a curative and prophylactic measure. (4) The most constant and reliable symptoms indicating the existence of appendicitis are recurring pains and circumscribed tenderness in the region of the appendix. (4) All operations should be done through a straight incision; parallel to and directly over the cæcum. (6) The stump after excision of the appendix should be carefully disinfected, iodoformized, and covered with peritoneum by suturing the serous surface of the cæcum on each side over it with a number of Lembert stitches. (7) The abdominal incision should be closed by two rows of sutures, the first embracing the peritoneum, and the second the remaining structures of the margins of the wound. (8) Drainage in such cases is unnecessary, and should be dispensed with.—*Medical Progress.*

CREOSOTE FOR PULMONARY TUBERCULOSIS.—Dr. Beverley Robinson, who is the pioneer in this country in the use of creosote, prefers small and frequent doses. He commences with doses of one-half to one minim, given three to four times daily, and gradually increases the frequency to every two hours, unless the stomach proves intolerant. He finds that few patients can bear a daily dosage of more than twenty minims, although one of his patients took sixty-four minims daily. His method is a very good one and commends itself on account of its safety, and is always capable of being pushed to the fullest extent compatible with the comfort of the patient.

Some prefer to give creosote in pill form, others in capsules, while there are those who favor various mixtures of this article. The better way is to give it in an alcoholic or vinous mix-

ture. A noted German authority combines it with two parts of tincture of gentian.

Much of the success acquired from the use of this remedy is attributed to the employment of a reliable article, one of absolute purity manufactured from beech-tar.

I have employed the following formula with good results:

℞. Pure beech-tar creosote, Merck's ʒj
Fl. ext. gentian . . . . ʒij
Comp. tincture of cardamom . ʒj
Alcohol . . . . . ʒij
Simple sirup . . q. s. ad. ʒviij
M. Sig.: One teaspoonful as directed.

After tolerance is established, the quantity of creosote and gentian is gradually increased in the proportion given above.—*Dr. Hall in Medical Record.*

EFFECTS OF MEDICATED INHALATIONS.—Dr. A. Irsai, of Buda-Pesth, has made some instructive laboratory observations on the effects of the inhalation of various substances on the lungs and air passages. Inhalation of air impregnated with the vapor of oleum terebinthinæ produced distinct pallor of the lung-tissue, due, doubtless, to spasmodic contraction of the pulmonary capillaries. Oleum juniperi and oleum pini sylvestris produced similar results, but less in degree. Oleum eucalypti, oleum anisi, oleum menthæ, and menthol, similarly inhaled, produced scarcely any change in the color of the lung tissue. Creosote, thymol, and in a still greater degree guaiacol, produced redness, with great hyperæmia of the lungs. From these observations Dr. Irsai concludes that in acute catarrhal affections, with swelling, hyperæmia, and profuse secretion, those substances which produce anæmia of the lungs should be chosen; while in chronic torpid conditions, or in phthisis, where the supply of blood and the nutrition of portions of the lung are defective, substances which induce hyperæmia should be used. With any tendency to hemorrhage, creosote or guaiacol may prove dangerous.—*London Lancet.*

A REMEDY FOR CHRONIC RHEUMATIC ARTHRITIS.—Mr. Hugh Lane, in his recent work on Rheumatic Diseases, again emphasizes the value of the old recipe commonly known as the "Chelsea Pensioner." Lord Anson is said to have given three hundred pounds for the liberty to make it public.

℞ Honey, ʒxvi
Sulphur, ʒi
Cream of tartar, ʒi
Rhubarb, ʒiv
Gum guaiacum, ʒi
Nutmeg, no. i.—Misce.

Sig.—Two tablespoonfuls in a small tumbler of white wine and hot water on going to bed, and the same quantity before rising in the morning; the patient to remain in bed until any perspiration that may be occasioned has subsided. —*Internat. Med. Mag.*

FOR habitual constipation, Dr. Staple (*Hosp. Gazette*) recommends the following:

℞.—Ext. cascaræ sagrad., fld. - fʒj
Tinct. nucis vomicæ - - *m* x
Tinct. belladonnæ - - *m* v
Aquæ - - - - fʒj. M.
This dose t.d.

—*Coll. and Clin. Rec.*

A WRITER in *Med. Press* suggests the following treatment of dysentery:

Salol - - - - ʒj
Syrup of tolu - - - ʒij
Extract of opium - - grs. ij
Cognac - - - - ʒj
Gum water - - - ʒvij

A tablespoonful every hour.

—*Coll. and Clin. Rec.*

DIARRHŒA—Dr. A. Loomis recommends the following mixture in diarrhœa:

℞.—Tincture opii.
Tincture rhei aa fl - ʒss
Tincture catechu comp fl ʒi
Olei sassafras - - M xx
Tincture lavandul æco. q. s. ad fl. ʒiv

Mix. Dose—A fluid drachm after each movement.—*Med. Fortnightly.*

CURE FOR MOSQUITO BITES.—For bites of insects, attended with itching, the best remedy is menthol in alcohol—one drachm of the former to one ounce of the latter. This speedily allays the irritation, and a few applications only are needed to effect a complete cure. But it should not be used where the skin has been broken, as by scratching; the remedy then is the oxide of zinc ointment, in an ounce of which the apothecary should rub up ten grains of carbolic acid.—*Boston Journal of Health.*

Miscellaneous.

CANADIAN MEDICAL ASSOCIATION. — The twenty-fifth annual meeting of the Canadian Medical Association will be held in Ottawa on Wednesday, Thursday, and Friday, 21st, 22nd, and 23rd September, under the presidency of Dr. John L. Bray, of Chatham, Ont. Arrangements have been made with the Grand Trunk and Canadian Pacific Railways whereby members may obtain return tickets for one fare and one-third. Members and delegates must procure certificates from the station agent at place of departure. Judging from the number of members and delegates who have signified their intention of being present, the meeting to be held in Ottawa will in all probability be a very successful one. Members desirous of contributing papers will kindly communicate with the general secretary (Dr. Birkett, 123 Stanley Street, Montreal) at as early a date as possible. Appended is a partial list of papers: Address in Medicine, "The Treatment of pulmonary tuberculosis," Dr. J. E. Graham, Toronto, to be discussed by Dr. Prevost, Ottawa; address in Surgery, "Observations on the progress of Surgery in our own day," Dr. Donald MacLean, Detroit, Mich., to be discussed by Dr. V. H. Moore, Brockville; address in Obstetrics, to be discussed by Dr. Harrison, Selkirk; "Gastro-Enterostomy," Dr. L. McFarlane, Toronto; "Chronic Bright's," Dr. McPhedran, Toronto; "Intussusception and its treatment by operation," Dr. F. J. Shepherd, Montreal; "Treatment of abortion," Dr. K. N. Fenwick, Kingston; "The management of goitre," Dr. Dupuis, Kingston; "Uric acid in children," Dr. A. D. Blackader, Montreal; "Diseases of the naso-pharynx associated with ocular affections," Dr. Buller, Montreal; "Prostatectomy," Dr. Geo. E. Armstrong, Montreal; "Appendicitis," Dr. H. P. Wright, Ottawa; "Biological analysis of some Canadian water supplies," Dr. Wyatt Johnston; "Unrepaired laceration of the cervix the most common cause of epithelioma of the cervix uteri," Dr. Lapthorn Smith, Montreal; "Case illustrative of the influence of diseases of the female generative organs upon the visual apparatus," Dr. Ryerson, Toronto; (1) "Two early deaths from gonorrhœa," (2) "Enterectomy for the cure of fæcal fistula," Dr. H. H. Chown, Winnipeg; "An epidemic of morbilli hemorrhagici," Dr. C. J. Edgar, Sherbrooke; "Hemorrhage in the newborn," Dr. F. A. L. Lockhart, Montreal; (1) "Administration of chloroform and the dangers incident thereto," (2) "(*a*) Phlebitis of the left femoral vein caused by an embolism coming on three weeks after hysterectomy; (*b*) Aneurism of the abdominal aorta," Dr. J. D. Balfour, London; ———, Dr. A. E. Praeger, Nanaimo; (1) "Notes on eye lesions consequent on nasal affections," (2) "Traumatism of the labyrinth," Dr. Geo. Baptie, Ottawa. Papers have also been promised by Sir James Grant, Ottawa; Dr. Mullin, Hamilton; Dr. George McDonald, Calgary; and Dr. Johnson-Alloway, Montreal. A special general meeting of the Association of Medical Officers of the Militia of Canada will be held during the session of the C.M.A.

MEDICAL SOCIETY OF THE COUNTY OF ERIE. —At a meeting of the above society held in Buffalo, under the presidency of Dr. W. Warren Potter, Dr. H. R. Hopkins offered the following:

Whereas, this society has had the rare privilege, at this meeting, of the presence of eminent and honored visitors and guests, viz., Dr. James F. W. Ross, of Toronto; Dr. Joseph Price, of Philadelphia; Dr. Lewis S. McMurtry, of Louisville; Dr. Charles A. L. Reed, of Cincinnati; and Dr. Brooks H. Wells, of New York, and has also had the greater privilege and pleasure of listening to most profound and scholarly papers and practical and edifying discussions from these eminent visitors; and,

Whereas, professional courtesies of the kind just received by this society are only offered and received at the cost of great personal sacrifice of opportunity and energy; therefore,

Resolved, That this, the Medical Society of the County of Erie, at its semi-annual meeting, June 14, 1892, does now and hereby tenders to Doctors Ross, Price, McMurtry, Reed, and Wells a vote of thanks in testimony of its appreciation of their singular professional eminence and personal courtesy.

The preamble and resolution were adopted unanimously by rising a vote.

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THE

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EDITOR:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

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TORONTO, SEPTEMBER 16, 1892.

Original Communications.

THE EARLY DIAGNOSIS OF HIP DISEASE.*

BY W. J. GIBSON, M.D., OF BELLEVILLE.

The frequency of the occurrence of hip disease; the peculiar features it presents; the disastrous results, not only to the utility of the limb, but to life itself, which too frequently accompanies its progress, has given it an especial prominence among surgical diseases of the joints. Formerly it was thought to be dependent almost entirely upon scrofulous taint, and many authors still regard it as mainly of constitutional origin.

When we consider the period of life at which hip disease usually begins; the developmental process through which the osseous framework is progressing up to the age of puberty; the manifold accidents through which, in childhood, the hip joint is liable from falls, over-fatigue, exposure to wet and cold, or to direct injury, the natural conclusion is that the earliest cause is not so much due to constitutional taint as to local injury.

For purposes of diagnosis, the affection may be divided into acute and chronic; or if attention be directed to the structure in which it primarily begins, arthritic, acetabular, and femoral (Erichsen), or synovitic, femoral, and pelvic (Barwell). It is not always possible to accurately determine the exact seat of the primary inflammation. A discussion on this point would, however, be of more interest to pathologists.

*Read before the Ontario Medical Association, June 2nd, 1892.

Certain general phenomena which are usually associated with the disease might be mentioned, viz., pain, attitude, imperfect mobility, fixity of the joint, suppuration, sinuses, dislocation, and anchylosis. The four last mentioned are only to be found in advanced cases, and therefore are not pertinent to the present paper.

In the acute form, the progress is so rapid that any attempt at exactness in tracing the local symptoms is well-nigh impossible. They differ but slightly from the general symptoms as manifested in acute synovitis and ostitis of other large joints. The anxious fear of the patient lest the limb should be disturbed; the flexion of the limb; the attitude of the little sufferer in grasping it for purposes of support or to prevent muscular tremors; the adduction and shortening; the intense suffering betrayed by the agonizing cries of the child, all point to rapidly progressive and probably destructive changes. The earlier stages of the disease are quickly passed through, and the third stage often reached in a few days.

In the chronic form, the symptoms are more insidious in their onset. For a considerable time a certain amount of lameness may be noticed, not at all constant, but more apparent after fatigue or unusual exercise. The lameness may disappear if rest be secured, but again recurs in a more marked and persistent form until a peculiar dragging of the limb takes place. The affected limb is never placed in advance, but always brought up slowly to the

other, accompanied by inclination of the body to the unaffected side. As the weight comes on the unsound limb, it is quickly shifted to the sound side. After a period of rest, the lameness and limping in part disappear. Although the lameness is not entirely due to pain, but rather to a dread that putting weight on the affected limb may cause pain, it must be borne in mind that the presence or absence of pain is probably in large measure due to the fact that the seat of the primary inflammation is not always in the same structure. If the patient be examined when resting, especially if lying down, it will be observed that although the general attitude of the body may differ in different cases, the leg will be *flexed* in all cases. If questioned as to the seat of pain, intelligent children will refer it to the knee; it may be to a well-defined spot on the inner aspect of the knee, or all around it. Not infrequently the pain is located on the inner side of the thigh, at the apex of Scarpa's triangle. The distribution of the obturator and anterior crural nerves will account for the pain in these regions, and yet it has been demonstrated that pressure on the exposed head of the femur will cause pain to be felt at the knee alone. Careful manipulation at this stage may reveal slight thickening behind the trochanter major and within the groin. Doubtful as the foregoing symptoms may be as to the precise nature of the trouble, if, in addition, there be found a certain *fixity* of the joint, there can be no question that we have to deal with hip disease.

Too much care and gentleness cannot be exercised in manipulating the limb for the purpose of ascertaining the presence or absence of fixity of the joint. With the patient stripped and lying on the back on a firm mattress or table, a casual examination of the foot, ankle, and knee will secure the confidence of the child. The unaffected limb may be examined by lifting it from the mattress to a position at right angles to the body. The same manœuvre may be tried with the affected limb, and while doing so be careful to observe whether the pelvis remains quiet or moves with the limb. Placing the affected limb flat on the mattress, observe whether the loins are in contact with the mattress or are arched upwards. Again taking the sound limb below the knee, flex the leg on the thigh, the thigh on the abdomen, adduct, abduct, and rotate the limb, all the time watching the pelvis, which will be observed to be quiet, or nearly so. Taking the unsound limb, repeat the same manœuvres, and it will be seen that the pelvis moves with each motion of the limb, while the head of the femur lies quiet in the acetabulum. This method (Barwell's) will elicit the very earliest sign of disease in the joint.

In the second stage of the malady there are certain "posture symptoms" which are regarded as diagnostic of the affection, though they must not be taken as the only phenomena present at this stage. These symptoms are lengthening or shortening of the limb, on which great stress is laid by some authors as being characteristic of hip disease. When such symptoms are present at an early stage, careful investigation will reveal the fact that they are only apparent, not real, and are dependent on inclination of the pelvis, and are not to be regarded as early indications of the disease. When such symptoms become so marked as to be easily recognizable, the disease has already reached an advanced stage.

To determine whether lengthening exists, let the patient stand with back to the surgeon, clothes raised above the waist. The patient will now stand on the sound foot, with the other in advance, and resting sometimes on the sole, but usually on the toes, with knee bent. There will also be noticed some lateral separation of the limbs, and any attempt at change of position causes him to lose his balance in the endeavor to avoid putting weight on the affected limb without altering the angle between the femur and the innominate bone. It will further be observed that the crest of the ilium is lower on the affected side, and that the spine assumes a curve, with the convexity towards the affected side. Another important symptom characteristic of the disease at this stage is *flexion* due to rigidity of the muscles, the psoas, iliacus, and adductors being in a state of great tension. Wasting of the limb now begins, the pains are more intense and somewhat different in character, and are described as "starting pains." Tumefaction, or swelling, is also a feature of this stage, and is usually preceded by a regular and continuous rise of temperature, which

points to the probable commencement of suppuration followed by rapid disorganization of the joint.

THE EXPECTANT TREATMENT OF HIP-JOINT DISEASE.

BY DR. BINGHAM.

Mr. President and Gentlemen:

So much has been written upon this subject of late years that one finds it difficult to record observations that may not appear trite to the observant members of the profession; and it would doubtless have been wiser had your committee selected for the task of preparing this paper some more ardent admirer of the expectant plan of treatment. The younger surgeons, more particularly, are perhaps too liable to chafe at the restraints and uncertainties of what must inevitably be a prolonged course of mechanical treatment, and elect rather by an immediate radical operation to arrive at what they consider to be equally good results. And I am free to confess that from a careful study of pathology of the condition, and a somewhat limited experience and observation, my own inclinations have been in favor of early and radical interference. This tendency is doubtless encouraged by the immediate and great success which often attends the efforts of the excisionist. This is well illustrated by such cases as that of Harry C., at present under my care at the Victoria Hospital. For more than a year he was hobbled by splints and crutches, leading a miserable and painful life. On April he came into my clinic, owing to an abscess which was pointing half-way down the thigh on the outer surface. I found the abscess communicating with the hip-joint and excised the badly impaired joint on April . . . Immediate results: Normal temperature, invigorating sleep, freedom from pain, healing by first intention; and on May 11th he is trotting about the ward quite comfortably. But one cannot forget that such a case must not yet be pronounced permanently cured, and an occasional death from tubercular meningitis or pulmonary phthisis rapidly following an operation is apt to dampen one's ardor. And I would recommend every surgeon who has believed that the true solution of the problem lies in the use of the knife to study carefully the record of such men as Lewis, Sayre, or Lovett and Shaffer. The former has recorded 407 cases treated by mechanical methods; of these 301 are cured (viz., 71 with perfect motion, 142 good motion, 83 limited motion, and 5 ankylosed); under treatment 14, abandoned treatment 3, discharged 2, unknown 78, died 9.

On the other hand, Poore, of New York, has reported in April of this year 66 cases of excision, as follows: 32 cured, 25 died, 3 discharged relieved, 2 not improved, 4 in hospital.

These results are interesting, if not very encouraging, to us as surgeons, and, while I decline to accept them as indicating the average results obtained, they should warn us as searchers after truth to refrain from bigotry in method or observation. One great difficulty is that the majority of these cases occurring, as they do, among the poorer classes do not seek surgical assistance until the inroads of the disease are far advanced, when mere mechanical treatment is in the opinion of many no longer indicated. But let us suppose that we are fortunate enough to see the case in the earliest stage of the disease, I presume there is not one of us who would not give the expectant plan of treatment a careful trial before proceeding to radical measures. This first stage may almost invariably be diagnosed by the careful observer. Usually there is some abduction (or there may be adduction) of the limb with external rotation, and perhaps some flexion. The pain, which is very variable, may be wholly referred to the knee or along the thigh. But perhaps the most important symptom at this early period is the spasmodic contraction of the muscles around the joint, which is to be very well seen upon extreme external rotation and abduction. And this reflex muscular spasm should sound for us the keynote of our treatment of the early stage. It is the effort of nature to protect the joint and to maintain the head of the femur as far as possible immovable in one position until the inflammation subsides. Let us imitate nature, then, in so far as absolute fixation and protection of the joint are concerned. But let us go farther, and by *traction* secure immunity from irritation to the diseased head by pressure on the acetabulum. In pursuance of this method, then, the patient should be confined to bed. A long

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straight splint is applied from axilla to ankle on the sound side, and to the affected limb longitudinal extension is applied by weight and pulley, at first in the direction of the deformity, gradually changing the direction of the force applied until the limb is parallel with its fellow. In addition, another force is applied transversely by fastening a loose bandage around the upper third of the thigh, to which a cord is attached and a weight hung over the edge of the bed. Thus traction is applied in two directions, first in the long axis of the limb, and secondly in the direction of the long axis of the neck of the femur. This transverse or obliquely transverse force, as you will observe, is directly opposed to the powerful adductors and glutei which drag the head upward and inward against the acetabulum. The joint is thus rendered perfectly immovable, and at the same time the health of the patient is built up in every possible way with pure air, nutritious diet, etc. We have now placed the child in the best possible position to combat the early inroads of the disease.

But here at least two questions will be encountered.

(1) Even in the early stage of the disease, would not the patient be better up and about with a properly adjusted splint?

(2) As a result of this absolute fixation, which may have to be prolonged, will not ankylosis be sure to occur?

Both questions may be answered in the negative.

In reference to question (1), I would say that absolute rest to the joint is a prime necessity. We are dealing with a disease which possesses some of the essentials of malignancy, especially where any irritation co-exists; therefore, I would avoid even the possibility of irritation by maintaining the recumbent position until any acute symptoms have *completely* subsided.

It is true we are told that in many of these cases in the early stage the bacilli are frequently absent; this can only be relatively correct.

In a tuberculous patient the bacilli are present somewhere in the body, and the simplest form of inflammation of the hip-joint, the result of some trifling traumatism, will quickly become the rallying point of the disease germs. Let us treat it, then, from the beginning as though the bacilli were really present in the inflamed centre.

In answer to the second question, Phelps, of New York, has demonstrated by experiments upon dogs that absolute fixation of a healthy joint does not produce ankylosis even at the end of five months. It is the prolonged severity of the inflammatory process, not the mere immobility, that produces ankylosis. But even should bony ankylosis result, what is this compared with the saving of the patient's life?

How long are we justified in the continuance of this treatment of fixation and traction with the patient in the horizontal position?

That depends upon the conduct of the disease and the general health of the patient. Perhaps two weeks, perhaps two months. Either one of two courses will the disease pursue. Either the deformity, inflammation, and pain, and all symptoms of disease will gradually subside (that is, pathologically speaking, the tuberculous nidus will return to a quiescent condition and be rendered comparatively harmless by an encapsulating area of healthy bone more or less consolidated); or, on the other hand, the disease will gradually progress. It is highly essential that we should be able to ascertain which of these courses is being taken by the disease; and it is equally important that such knowledge be arrived at without inflicting undue violence upon the joint by rough manipulation on the part of the examiner.

We recognize the fact that the history of these cases almost invariably begins with some petty traumatism, which nevertheless proved sufficient to light up the disease; and yet, in the face of this fact, do we not sometimes see the examining surgeon, in his efforts to ascertain the progress of the disease, violently extending and rotating the limb, even calling anæsthesia to his aid in order that the protesting voice of nature may not interfere with his energetic manipulations?

The extension, then, should be removed from time to time, and the limb and joint *carefully* examined with the least possible violence.

In the more favorable event we will find the deformity or distortion has appeared, and the limb will be parallel with its fellow; pain on motion and tenderness on pressure will be absent or much reduced, little or no thickening in the joint will be felt, and the ilio-femoral crease will be defined. Some apparent lengthening

may be present owing to the persistent tilting of the pelvis, the functions of the joint will be fairly restored, but external rotation will still be imperfect owing to the continued spasm of the muscles.

Now with this condition of things present we are justified in immediately discarding the extension weights, carefully adjusting a long traction and fixation splint, and with the aid of a pair of crutches and a high boot on the sound leg getting the patient about the ward and into the open air. While the patient progresses favorably this complete fixation and traction should be maintained if necessary for a prolonged period, which should not be shortened by the dread of ankylosis, but should only be terminated by the cure of the disease. In reference to the form of splint to be used, that belongs rather to the paper read by Dr. McKay, who has discussed the mechanical treatment. I will simply say that the ideal splint aims at absolute fixation of the joint with prevention of pressure upon the femoral head or the acetabulum, and these objects appear to be fairly well attained by the splint recommended by Phelps, of New York, in the *Medical News* of Dec. 16th, 1891. It may be removed at night and the extension weight reapplied.

Now in reference to the more unfavorable event, viz., when in spite of your early treatment in the recumbent position, the disease gradually extends. This unfortunate fact may be ascertained by the increasing pain on motion and tenderness on pressure, possibly apparent shortening with adduction; the ilio-femoral crease may be lost or ill-defined, thickening may be felt in the joint or in the neighborhood of the great trochanter; should the disease be sufficiently advanced, fluctuation may be made out and abscesses may be pointing around the joint or down the thigh under the tensor fasciæ femoris muscle. In this condition of advancing disease, with my present light of personal experience and observation, expectant treatment must now terminate and resort be had to the knife. Remembering the pathological condition present, I believe the dangers of absorption have now become so great as to seriously imperil the patient's life and to necessitate the complete removal of the diseased product.

I am aware of the wonderfully encouraging statistics recorded by American surgeons of late years in the mechanical treatment of these more advanced cases, but I cannot help viewing the condition of these mechanically "cured" cases as, to say the least of it, precarious. Surely we must admit that the tubercle is still present, though encapsuled and quiescent, yet capable of rekindling the inflammatory process when irritated by traumatism. Shaffer, of Boston (and who is more conservative than he?), admits that he has seen many cases of relapse in six and eight years, and even sixteen years, after apparent cure by mechanical fixation methods.

Should we, however, for any reason be obliged to continue expectant treatment after caseation has taken place, the patient if about should at once be returned to bed, abscesses opened aseptically, the cavities washed out with H_2O_2 and stuffed with iodoformized gauze, and weight extension reapplied. In spite of all this, should suppuration continue and the patient's health begin to give way, there is certainly no longer any excuse for delaying the radical operation; and very probably you will afterwards regret you had not resorted to excision at an earlier period of the disease.

In this brief paper, I have confined myself to hip disease as seen in children or youths, because it is in these cases that the element of doubt as to treatment is largely centred.

I have had in view particularly those cases in which the disease develops on or near the epiphyses of the bone, and not those cases of synovial origin so rare in childhood.

I have not taken into account the circumstances in the life of the patient which might preclude even a comparatively brief course of expectant treatment and might render it necessary to give him the benefit of immediate radical interference.

I have not referred to those cases of non-tubercular hip disease periostitic in origin, and following the continued fevers, more especially typhoid; nor have I included cases of congenital syphilis. I have refrained from quoting statistics largely because they are valuable to a certain degree only, and in the present state of our knowledge of the disease are often misleading.

INCLUSION.

(1) Hip-disease when seen in the early or

first stage is often amenable to mechanical treatment.

(2) Although in the early stage the bacilli may frequently be absent, the joint should be treated from the beginning as though they were invariably present.

(3) An important cause of the extension of the disease is the irritation due to pressure between head of femur and acetabulum.

(4) This is best prevented during the acute period by rest in bed with fixation of the body by a long splint to the sound side, and longitudinal and transverse extension by weights to the diseased joint.

(5) As soon as the early symptoms have *quite* subsided, the patient should be fitted with a long traction and fixation splint, and not allowed to rest for one moment on the diseased joint until completely cured.

(6) After indications of softening have become apparent and persistent, expectant treatment is no longer indicated.

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THE OPERATIVE TREATMENT OF HIP-JOINT DISEASE.*

BY A. PRIMROSE, M.B., C.M. EDIN., M.R.C.S. ENG.,
Associate-Professor of Anatomy in the University of Toronto; Surgeon to the Victoria Hospital for Sick Children.

Extreme views are at present advanced—on the one hand, by enthusiastic advocates of the expectant method of treatment, and, on the other, by surgeons who, with equal enthusiasm, advance views in favor of operation at an early stage in the disease. It is impossible to form a fair judgment with our limited amount of experience, and with very little of statistical value. We must remember that the operation of hip-excision is one which has of late years become greatly modified. The technique of the operation has been completely changed, and the large mortality formerly resulting from the operation has been reduced in early cases to five per cent. Wright, of Manchester, has a still better record, having operated in over one hundred cases with only three deaths.

It is held, that in the vast majority of cases which are submitted to early operation the course of the disease is cut short very materially; on the other hand, under expectant treatment, our patients may be doomed to a lengthened period of illness—two or three years would not be considered unusual. If, therefore, we can submit our patients to an operative procedure which is to effect a comparatively early cure, we are perfectly justified in doing so. It is our duty to investigate the question, and if we find that we can rid the patient entirely of a disease which is likely to run a prolonged course, then we should not hesitate to give the sufferers from hip-joint trouble the great benefit which may be derived from modern methods of dealing with such cases by operation. Statistics are not as yet available to prove our ground; we cannot say absolutely in a given case that we can terminate the disease in so many weeks or months. This result is undoubtedly obtained in many cases, but not in all. Then, again, the danger of recurrence seems to exist after operative procedure as well as after apparent cure from expectant treatment. It would appear that better results as to function of the joint are obtained after treatment by rest than after operation. Concerning the results after operation, the only definite statement that one can find is that of Sir William MacCormack, who states that one-half of successful cases walk without a stick; the other half require the aid of a stick in walking.

An error in judgment is often made in considering the advantages of operative procedure, by taking the results of operation at all stages of the disease and comparing them with the results of treatment by rest. Now the most ardent advocates of operative procedure

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only recommend such methods in the early stage of the disease; on the other hand, those surgeons who can see nothing good in early operations are fond of citing the cases which have been subjected to operation at all stages of the disease. The statistics thus produced are of necessity very misleading; they include many cases which have been subjected to expectant treatment for a lengthened period, and then operated upon as a last resource. This is of course eminently unfair. We must remember that the question at present is only concerning the disease in its early stage. At certain stages of the disease we find most surgeons of one opinion as to the proper course to pursue; thus, given a large abscess in connection with the joint, with constitutional symptoms, the result of pyæmic absorption, with pain and emaciation, and we find that few surgeons would refuse to open the abscess and remove diseased tissue. In considering the question of operation in hip-joint disease, therefore, we must confine our attention to the question as it affects *early* cases, and we must not be influenced by the misleading statements made by those who are forever harping upon the dire results of operative procedures, pointing to patients who have been the victims of injudicious treatment by retentive apparatus until the disease has advanced to such an extent that their only hope lies in operation. These cases often do badly, and we would be surprised if it were otherwise. We find, among British authorities, that Barker considers operative procedure legitimate only in the early stages; whilst Marsh, who is an advocate of conservative treatment, seems to think that such measures are only justifiable in the late stages of the disease.

Let us consider for a moment what may be accomplished by operation in an early stage of hip-joint disease. It is possible for us to submit our patient to an operation which is attended with very little risk to life, and we may be able to remove entirely the disease in the articulation. Further, if the disease be restricted to a small area it may be possible for us to operate through comparatively healthy tissue, or at most through tissue which is the seat of a non-infective inflammation (which is attendant upon and surrounds the tubercular deposit); we may reasonably hope for healing by first intention, and, having accomplished this, we keep our patient at rest. Surely, under such conditions, the sufferer is in a better condition for speedy cure than would be the case if we trusted to rest alone, without any attempt to eradicate the tubercular deposit which is the cause of the whole trouble. The operation, therefore, in early cases is advocated on good, sound surgical principles, and the results obtained so far are most encouraging. Of course we would expect a better result the earlier the disease is detected and the operation performed.

The resulting deformity after operation is not greater (probably not as great) as after treatment by prolonged rest in splints. The amount of shortening is inconsiderable; this is accounted for by the fact that the growth, in length, of the femur takes place chiefly at the lower epiphysis. Then, again, in long-standing cases of hip disease without operation we have a considerable amount of atrophy of bone going on, due more particularly to continued pressure; the bone is the seat of a rarefying osteitis, and the contraction of muscles about the articulation keeps the articular surfaces constantly pressed against one another, and, as a result, atrophy and shortening takes place. As to the age for operation, we must remember that the operation is much more formidable in very young infants and in adults than it is between the ages of, say, 5 and 16. Many surgeons will not excise the joint in the adult.

The methods of excising the hip-joint are numerous. The older methods by external incision are well known, and it is not necessary to describe them in detail. These operations are comparatively easy to perform, but the great objections to them are that the function of the joint is much interfered with by detaching the muscles attached to the great trochanter; then, again, the head of the bone is forcibly dislocated and made to project from the wound before the neck is sawn through. This procedure entails rough handling of the diseased tissue, which is unnecessarily broken up, and infected material may in this way contaminate the healthy raw surfaces of our wound. Operation by anterior incision is much to be preferred; the earlier operation of this kind was that suggested by Lücke. An incision ½ inch below and internal to the anterior superior iliac

spine was carried downwards and inwards in the line of the axis of the femur. This incision passed down internal to the sartorius muscle and ran parallel to the anterior crural nerve; the anterior capsular ligament was opened up and the neck of the bone reached and divided. The objection to this method is that the strong ilio-femoral band is greatly cut up; it is so thick that it is often necessary to divide some of the fibres transversely; this important element in the strength of the joint is damaged to a considerable extent and the integrity of the joint is impaired. Again, the incision is so nearly over the head of the bone that, if the disease prove to have involved the neck extensively, or the trochanter, it is impossible to remove it.

Barker's method of excising the hip by anterior incision is the best procedure. His incision begins ½ inch below and external to the anterior superior spine, and is carried down 3 or 4 inches in the axis of the limb. The incision is carried boldly down to the bone, passing between the sartorius and rectus muscles on the inner side, and the tensor fasciæ femoris and the glutei muscles on the outer side. The anterior capsular ligament is opened up and the articulation exposed; the neck of the bone is then divided by means of a narrow-bladed Adam's saw, and the head and neck removed. The acetabulum may be explored, and if diseased tissue be found there it should be removed, and the soft parts of the articulation should be similarly treated. For this purpose the use of Barker's flushing scoop is valuable. It combines the advantages of a Volkmann's spoon (and is shaped like it) and an irrigator at the same time. The scoop is hollow, and allows a stream of boiled warm water (temperature 105° to 110° F.) to flow through it; thus, as the diseased tissue is detached it is flushed out of the wound. In many cases the wound may be closed by suture without a drainage tube. This method of operation gives free access to the joint, there are no muscular attachments disturbed, the ligamentous strength of the joint is not impaired, and the diseased tissue is removed entire with as little breaking up as possible. It may be thought advisable to drain the wound cavity: this is particularly needful in those cases in which extensive disease is found with suppuration. It has been urged that drainage is necessarily inefficient from an anterior wound. It is very easy to overcome this objection, however; thus, after excision by the anterior method, a pair of sinus forceps may be thrust through the posterior capsular ligament, close behind the trochanter, and the point of the forceps may be cut down upon from behind; a drainage tube may then be placed in position and the wound cavity thus drained from a dependent posterior opening.

A question of considerable importance in excising tubercular bone is with regard to the amount of bone to be removed. We cannot always judge accurately by microscopic examination as to the precise limit of the tubercular disease. We must remember that a very small tubercular focus may be surrounded by a very large area of inflammatory products of a non-infective character. Thus we find rarefying osteitis accompanying the tubercular process. We may find very extensive bone atrophy; this bone, however, may possibly recover if we remove the primary cause of the trouble in excising the tubercular disease. It is very common practice, when advanced atrophy of the bone is found, to proceed to amputation. This is more particularly the case in diseased articulations other than the hip. The question which ought to be settled is whether or not it is necessary to remove all the bone which is the seat of rarefying osteitis. We are inclined to believe that such bone is not necessarily beyond hope of recovery. It is a point which has not, as far we are aware, been discussed. In settling it one would have to decide not only the possibility of restoration of such inflamed bone, but one would have to find some means of distinguishing between tubercular tissue and tissue the seat of a non-infective inflammation.

ANTIKAMNIA.—Dr. Caleb Lyon, of Rossville, Staten Island, thus speaks of antikamnia: I reiterate my assertions made nearly a year ago, and am daily prescribing antikamnia with happiest effects. In my practice it accompanies the maid from her virgin couch to her lying-in chamber, assuaging the perplexities of maidenhood and easing the trials of maternity with most gratifying results. I earnestly hope that the proprietors of this valuable remedial agent will keep it up to its present standard of purity and excellence

HIP-JOINT DISEASE—THE MECHANICAL TREATMENT BEFORE AND AFTER OPERATION.*

BY DR. A. M'KAY, INGERSOLL, ONT.

As it is not a part of my duty to discuss the merits or demerits of the purely mechanical as opposed to the immediate and heroic measure of removing all diseased tissues infected by tubercular deposit, but to confine my remarks only to some of the appliances in use at the present time, this paper will claim one essential merit, viz., that of brevity.

In looking over recent literature on the subject, one cannot help admiring the inventive faculties of some of our surgeons, as well as the admirable skill displayed in securing modifications to meet their own ideas on the subject. Fortunately for the general practitioner, however, we now have a considerable number of appliances to select from, and it should not be forgotten that the successful treatment will often depend on a proper selection of an instrument. As it is now admitted that the amount of force to be applied will vary with the circumstances, it should at least meet the following requirements, viz., relieve muscular tension, secure immobility of the joint, allow of extenson and counter-extension if required, and permit the patient to have plenty of sunlight and out-of-door exercise. During the first stage of the disease, should the symptoms be acute, extension by means of a weight and pulley will secure (by giving complete rest to the body) a more rapid control of the inflammation in the joint, and prepare the limb for the apparatus to be applied later on.

The most convenient method is by a single strip of plaster, commencing at the internal and upper portion of the thigh, passing under the sole of the foot and up the outside of the leg to the great trochanter to be covered by a bandage. Where the little patients are very restless, sand bags will often answer better than the long body splint for the purpose of keeping them quiet.

Flament, of Lille, reports the successful treatment of cases by means of continuous extension with an immobilization apparatus attached to a portable bed, so as to allow sunlight and fresh air. About the only essential difference between the various instruments is in the matter of extension.

Mr. Thomas, of Liverpool, desiring complete immobility of the hip joint, uses a posterior splint composed of an upright strip of soft iron reaching from the level of the angle of the scapula to below the middle of the calf, and bent so as to fit the incurvature of the loins. To this is attached three bands, the first at the top, the second above the knee, and the third embraces the leg. A thick sole is worn on the shoe of the sound foot, so as to allow of extension by the weight of the limb. The objections to this splint would appear to be insufficient extension, and the difficulty in managing the patients owing to the absence of a joint at the knee.

The results, according to Dr. Huddlestone, of Boston, are not very encouraging. Of 14 cases treated with the Thomas splint in the Children's Hospital 9 had abscesses; 9 had elevation of trochanter above Nelaton's line; 11 had atrophy of the thigh of over two inches; 5 had five degrees of adduction; 8 had some flexion; 6 had no motion at joint; 4 had motion of only a few degrees; 3 had good motion; 1 had perfect motion; and 6 were brought into the hospital for correction of deformity or relief of pain. Results: Good position, little flexion and adduction, great shortening, great atrophy, large number of abscesses.

The Sayer splint may be taken as an example of the other variety, allowing of extension by means of adhesive plaster attached to the lower band of the instrument and thigh, and counter extension by means of a perineal band attached to the other end. An extension bar at the side adjusts the amount of pressure.

I have had good results in three cases treated by a modified Sayer splint, having, instead of a ball and socket joint, a flat, stiff joint and an iron band around the hips. The side bar has a screw extension instead of the ratchet.

The mechanical treatment after operation, for from three to nine weeks, will be the same as for fractured thigh, with a certain amount of abduction, so as to prevent the end of the bone pressing on the wound, and extension by means of weights and pulley. After the wound has healed sufficiently, either of the splints referred to can be employed.

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A CASE OF SENILE GANGRENE.

BY H. J. SAUNDERS, M.D., KINGSTON.

The following case of senile gangrene, in which amputation was successfully performed, is, I think, interesting and worth recording on account both of the age of the patient and the unpromising appearance presented by the vessels and tissues in the neighborhood of the operation, which made the chance of healing look very hopeless.

E.G., æt. 77, a retired farmer, very stout, weighing about 300 pounds, whose heart and large vessels were evidently in a state of atheromatous degeneration, was attacked with "grippe" on January 7th. He suffered severely, having frequent attacks of syncope, and his pulse was at all times feeble and irregular. On February 12th he complained of intense pain in the heel of the left foot, which on examination appeared waxy-looking and bloodless; a few days later the toes and instep became waxy-looking and livid, and the heel was black and shrunken; a few days later a gangrenous patch appeared on the instep and on the outside of the leg. This progressed till, some weeks later, sloughs separated in each of the three situations; that on the side of the leg first, exposing the peronei tendons and muscles; next, that on the instep; and, lastly, that on the heel, leaving the insertion of the tendon Achilles bare. His general condition at this time was exceedingly unfavorable; the pain was intense, and only relieved by large and frequent hypodermic injections of morphia, as well as by taking it internally; constant diarrhœa persisted, resisting all treatment; the stomach was unable to retain any food except small quantities of milk, and the weakness and irregularity of the heart were such that syncope occurred if the patient were raised to the sitting position. Under such circumstances death seemed inevitable, and not likely to be postponed for more than a few days, or weeks at the furthest, and I deemed it useless to attempt to do more than to relieve his suffering as much as possible. Nevertheless he lingered on, contrary to my expectation, till the following May, without any material change. At this time his condition was so distressing from the constant pain and the discharge and effluvia from the gangrenous extremity that, after consultation with Drs. Fenwick and Garrett, I decided, with the consent of his family, to risk the removal of the limb. Accordingly, with their assistance, on May 17th, I amputated the leg above the knee. Hardly any trace of muscular structure was observable, all the tissues being in a state of fatty degeneration. Both the popliteal artery and vein were rigid and filled with black solid clot, and projected from the amputated surface like two fingers. The other vessels were very small and insignificant, and the hemorrhage altogether was so trifling that it seemed doubtful whether there were sufficient circulation to maintain the vitality of the flaps. Notwithstanding the apparently unfavorable condition, union took place by first intention. With the removal of the limb the pain subsided, and within a fortnight we were able to reduce the daily amount of morphia from four or five grains to half a grain, and at the end of that time to discontinue it altogether. The patient's health has steadily improved, and at the present date (Aug. 31st) his appetite is good and he is comfortable and free from pain. Owing to the condition of the heart he is unable to sit up, each attempt to assume the erect sitting position being followed by syncope. An additional hindrance to sitting up is also presented by the condition of the right hip, which is partially anchylosed, the result of a fracture of the neck of the femur received many years ago. I may add that the anæsthetic used was a mixture of chloroform 1 part, and ether 2 parts, administered in Clover's inhaler, and that it was borne well and not followed by any unpleasant after-effects. Some retraction of the tissues took place a few weeks after the operation and threatened unpleasant results, but was overcome by longitudinal straps of adhesive plaster, to the loops of which a flat iron was attached and hung over the end of the bed, so as to keep up moderate extension. This was continued for three or four weeks, when it was found no longer necessary.

THE NEW YORK PHYSICIANS' MUTUAL AID ASSOCIATION is now able to pay $1,000 upon the death of a member, which is the full amount allowed under the by-laws. At present the number of members upon the roll is 1,106.

Selections.

THE MANAGEMENT OF ECZEMA IN INFANTS AND YOUNG CHILDREN.

Clinical Lecture delivered at the Philadelphia Polyclinic

BY ARTHUR VAN HARLINGEN, M.D.,

Professor of Dermatology in the Philadelphia Polyclinic

GENTLEMEN,—The subject of eczema in infants and its treatment is one upon which I have had occasion to write and speak many times in the course of twenty years of the practice and teaching of dermatology, and I sometimes think that the theme is a little worn. But I have still reason to believe that all practitioners are not as fully able to cope with these cases as they would like to be; and, besides this, new students and young practitioners are constantly coming forward who require to be instructed upon some of these special points, which are not much dwelt upon in the course of medical training in our colleges. And, yet, among the first cases the young practitioner encounters are those of the various diseases and ailments of childhood.

Eczema cannot be named among the more serious diseases, but still you may meet cases at any time which will try your patience and baffle your therapeutic skill, and which, by the amount of suffering and sleeplessness caused the little patient and the worry and loss of rest to the parents and attendants, will sometimes rise to the proportions of a domestic calamity.

The infantile skin being particularly susceptible to external injury and irritation, it is not uncommon to see the milder forms of eczema spring up suddenly as a result of too much soap and water, of wet diapers, of slobbering about the neck, or merely from the rubbing and chafing of irritating clothing or exposure to the rigor of winter air in taking exercise.

The erythematous form of eczema here understood is characterized by a simple redness of the skin without infiltration, moisture, or discharge of any kind. It is not apt to be mistaken for any other disease, unless under exceptional circumstanses, which I will mention in a few moments.

It is very easy for this condition, occurring in the tender skin of infancy, to run into another and more serious form of eczema, accompanied by exudation and maceration of the uticle, or the formation of vesicles, and for this reason it should be checked at once. As it is almost invariably due to local irritation, the cause of this must be looked for, and so far as possible done away with.

One of the commonest forms of erythematous eczema in infants is that often called intertrigo, and which is here due to the maceration of the buttocks, groins, and thighs in the urinary and fæcal discharges retained in the child's napkin or diaper. When these discharges are normal they are rarely irritating, but an attack of indigestion or diarrhœa gives them an irritative character, and if the condition remains unchanged intertrigo and erythema supervene, and the condition soon goes on to the stage of moist eczema, usually beginning in the groins.

The appearance, which is at first only that of a more or less dusky redness of the skin, soon changes, and fissures occur in the folds of the groins and about the genitals and anus, the perspiratory secretion becomes rancid, and adds to the irritation and extreme discomfort, due to burning and itching, and pain on movement results.

In these cases the first thing to be done is to change the character of the alvine and urinary discharges. The fæces are apt to be white and curdy, and very sour-smelling. Give minute doses of calomel and soda, sometimes adding a little rhubarb, and correct any possible errors in the infant's dietary, and you will soon find a change, not only in the character of the stools, but also in the urine. The latter, which is frequently somewhat scanty, highly colored, and acid, with occasionally some deposit of urates, becomes changed by the rectification of the intestinal disturbance.

Meantime you must protect the tender skin from the irritating fluids in which it is constantly bathed. Ointments and greasy applications will not usually suit, because they quickly become irritative. A careful cleansing of the skin with some mild soap and warm water, followed by careful drying with a soft towel and a coat of vaseline, is very effective in giving relief.

The proper soap for use in these cases is one as nearly neutral as possible. Almost all soaps used in washing infants are too alkaline. Even the finest castile soap is not satisfactory. I have lately employed a German soap invented

by Dr. Unna, of Hamburg. It is called "*Basis seife*," and is carefully made so as to be as nearly neutral as compatible with the formation of suds in warm water. It is called "superfatted," but I think that is a misnomer.

If the eczematous condition requires local medication, a very mild astringent lotion acts better than other forms of treatment in most cases. The black wash of the Pharmacopœia, alone or with an equal quantity of lime-water, sopped on the skin or applied on soft rags in the folds of the skin from time to time, often acts surprisingly well. Powders are so apt to cake and crust that they must be employed with caution, and those containing starch should be avoided. Very finely-powdered talc, Fuller's earth, or, in some cases, the sub-nitrate of bismuth, are among the best.

When there are cracks and fissures, ointments may sometimes be used. The black wash, followed by an ointment of oxide of zinc and vaseline in equal parts, may be applied in small quantity. Now and then an ointment of sub-nitrate of bismuth, half a drachm to the ounce of vaseline, may be employed.

The same principle applies in the treatment of erythematous eczema about the neck, etc., only that no internal treatment of any kind is required in these cases.

I have said that the diagnosis of erythematous eczema in infants presents no difficulty. The only exception to this is met with occasionally in certain cases of eczema about the buttocks. Here, when there is a tendency to infiltration resembling rather papular erythema than eczema, a case will occasionally be encountered which resembles one of the erythematous forms of infantile syphilis.

The syphilitic eruption, however, is almost always accompanied by moist papules about the anus, and you will also be apt to find some other sign of syphilitic infection, notably that nasal catarrh commonly called "the snuffles." In suspicious cases a very close examination should be made to exclude the more serious constitutional disease.

Erythematous eczema is a disease of earlier infancy. After the first six months of extra-uterine life the commonest forms are eczema vesiculosum and eczema rubrum.

A little before the advent of the first teeth, children sometimes begin to show a slight redness in the cheeks, with the formation of incomplete vesicles. Often this does not extend beyond a small patch, which may come and go in sympathy with stomachal or buccal irritation. At other times the disease spreads rapidly, the cheeks and forehead become covered with a bright red, dry, or moist eruption, with a greater or less amount of exudation and crusting.

If the infant is badly nourished, or sometimes even when the general health is not perceptibly impaired, this eruption may spread and cover the whole head, and patches may appear elsewhere on the body and on the limbs. These are usually accompanied by much itching and irritation; the child weeps, struggles, and attempts to scratch and rub the irritated skin with fury. It seems to sleep little and cries constantly, depriving its attendants of rest, and demanding all the skill and solicitude of the physician to give relief. I need not dwell upon the picture, as it is, unfortunately, not an uncommon one.

In most of these cases the infant has had more or less digestive trouble. The cases I meet most commonly occur in children who have been brought up by artifical feeding. Your first efforts thus far are to be directed toward allaying any irritation which may be present in the alimentary canal. This is often no easy task. I cannot at present, however, go into this branch of treatment, which also you must naturally be prepared to advise according to the circumstances of each case.

I will say, however, that when no particular indication for treatment presents itself, the administration of minute and frequently-repeated doses of calomel is often of the greatest service. The course should last for twenty-four or thirty-six hours, and should be repeated every five or seven days, or at the beginning of each recurrence.

When the eczema occurs a little later, about the end of the first year, the teeth are almost always at fault. A fresh recurrence of the eczema may be looked for just before the eruption of each tooth. The moment the teeth appear through the gum, the eczema tends to subside. You may aid nature by incisions over the pressing tooth, often with very great advantage.

In severe cases it is certainly better to put the patient under some form of restraint. It seems cruel to prevent the little sufferer gaining any relief by rubbing and scratching. No one who has experienced the agony of itching would desire to restrain himself from the relief of scratching, temporary though such relief must be, and almost always followed by an increase in the inflammatory symptoms.

But in the case of infants the restraint should always be accompained by thorough and careful application of remedies calculated not only to relieve the inflammatory symptoms, but also to assuage the pruritus.

It is the custom to use ointments of oxide of zinc, but these are so adherent that, on the scalp at least, they are inconvenient. Ointments of some sort, however, are suitable for this form of eczema, and it is generally best to use vaseline as a base, although adeps may be substituted. Lanolin is so tenacious that it should not be used, except in combination with vaseline. One part of lanolin to four of vaseline makes a convenient excipient for whatever medication may be employed.

In those somewhat unusual cases where there seems to be little or no pruritus, an ointment of boric acid (twenty or thirty grains to the ounce) may be prescribed. In other cases a drachm of sub-nitrate of bismuth to the ounce of ointment is of use. These ointments are best applied spread on linen rags or on strips of paraffin paper. They should be cleaned off from time to time by the use of warm water and the "*basis seife*," mentioned above, because decomposition and irritation soon occur under such dressings.

In practice you will find it extremely difficult to have the head and face kept covered with dressings of any kind. The constant movements of the infant render it next to impossible to keep bandages in place. I should advise you, when possible, to make such applications and dressings with your own hands. In this way a great deal will be learned about the necessary manipulations, and your early struggles will render you more charitable towards the attendant when you find that your carefully-given directions have not been complied with, and that, on a second visit, a few scattered smears of ointment amid the raw and crusted area of diseased skin are the only evidence of any application having been made.

Curiously enough, one difficulty in making local applications in these cases comes from the reluctance of parents and attendants to "disfigure" their children by the application of bandages. It is a point of view I have never been able to take, that of regarding a swollen, red, crusted, weeping face and head, scarcely recognizable as human, in the light of a more agreeable object than the same parts covered with healing and beneficent applications.

Where there is pruritus, you would do well to have the various ointments employed rubbed gently into the skin in small quantities and at frequent intervals. The addition of from three to ten grains of carbolic acid to the ounce of ointments mentioned above will soothe the itching in most cases. Tar or oil of cade, in the proportion of a drachm to the ounce of ointment, is an excellent antipruritic; it is much more disfiguring than the carbolic acid, however.

An excellent preparation in this form of eczma is the following:

℞—Sulphuri precipitat.,
Picis liquidæ, aa ℥ss;
Ung. zinci oxidi, ℥i.—M.

Keeping in mind what I have said about the clinging properties of oxide of zinc ointment, you will not use this when there is much hair, but I know of no more generally useful ointment in these cases.

When the pruritic eczema is in the form of small patches, especially on the cheeks, and when the discharge is not very profuse, the following pigment is convenient:

Olei cadini, ℥i.
Collodii, f℥i.—M.

A camel's hair brush should be fastened to the cork so as to be withdrawn with it, and the attendant must be instructed to keep the bottle closed.

A coating of this pigment brushed over the diseased skin acts as an antipruritic, and also protects the diseased patch from the air and, to some extent, from the hands of the little patient. When the disease is on the cheeks, it is usually the most convenient application which can be made. The pigment stings slightly when first applied, but this discomfort passes away almost immediately. The child should

be held firmly to prevent struggling during the laying on of the pigment, and care should be taken to avoid getting too near the eyes.

You may think I have gone into these points with a good deal of unnecessary detail, but I can assure you that in this, as in so many other points of practice, strict and careful attention to details will alone give satisfactory results.

Older children often suffer from eczema, which may or may not have begun in infancy, and these cases, when chronic, are often very intractable, lasting all through childhood and even early youth, and sometimes hardly passing away at maturity. Scrofulous and ill-nourished children are very apt to suffer from vesicular and pustular eczema combined, or from the pustular form alone. In these cases tonics and nutrients are called for. Iron, cod-liver oil, extract of malt, and quinine may be employed from time to time.

Arsenic is a drug so commonly employed, even at this day, in the treatment of eczema of all kinds that you will naturally expect me to say something about it; but I must distinctly state, as the result of a very extensive experience in the use of this drug, that, in my opinion, it has no specific effect whatever upon the course of eczema, and that even as a tonic its use is limited. In children, disturbance of the digestion is frequently the most marked result of its administration, and through this the disease may be, and sometimes is, rendered worse.

There is a form of this protracted chronic eczema in children which occurs in those having an unnaturally dry skin; in fact, a tendency to the condition known as ichthyosis. Here you will be continually baffled in your efforts, even to subdue the eczematous symptoms, to say nothing of permanently curing the disease.

The local treatment, which in ordinary cases is based upon the same course described under the head of infantile eczema, must be supplemented in some cases, especially when the disease is extensive, and always when a general dry ichthyotic condition of the skin co-exists, by the frequent employment of baths.

These should be warm, and should be medicated by the addition of a quarter of a pound of ordinary washing soda and a pint of clear starch to thirty gallons of water. For a young child's bath, half of each of these proportions should be employed. The patient should remain in the bath some time, and when taken out should be dried without rubbing, and the appropriate applications made, when the patient should be put to bed to avoid catching cold.

In some of the more chronic cases of eczema in children, when a few circumscribed, thickened, itchy patches extremely resistant to treatment represent the disease, it may sometimes be necessary to have recourse to strongly stimulant applications, with a view to excite enough reaction to carry off the infiltration. Tar in ointments of various strengths may be employed alone or combined with a mercurial ointment, as in the eczema of adults. Washes of potassa caustica, from five to twenty grains to the ounce, may be applied by means of a small swab brushed over the surface. These applications should not be allowed to remain, but should be quickly washed off and followed by a soothing ointment. They should be applied cautiously at first, remembering the more delicate character of the child's skin.

Such are the principles of the management of eczema in children, and with these suggestions you will be able to give relief in all cases, and to cure a large majority.—*International Medical Magazine.*

A METHOD BETTER THAN SUSPENSION OF APPLYING A PLASTER JACKET.

BY RICHARD BARWELL, F.R.C.S.

The author states that he has for some years past ceased to employ suspension in kyphosis, and has straightened, as far as safety will permit, the patient's spine by a modification of his method of rachilysis, which used differently, has proved successful in lateral curvature; the force—viz., traction by a system of pulleys—being used while the patient is sitting. It is thus carried out in a case of dorsal kyphosis: The patient being closed in a skin-tight knitted vest, and, with the usual parts padded, sits on an ordinary office stool about two feet and a half high, between two opposing walls in which certain hooks, etc., are fixed as for rachilysis. A three-inch wide piece of webbing, with strong cords at each end, is secured to one of the back legs of the stool, and passing over the back of

the patient's thigh sufficiently tightly is also secured to the other back leg. A strip of moderately strong unbleached calico, broad according to the size of the patient, crosses the abdomen on and below the umbilicus. This in the position under consideration is designated "counter-traction band." By means of the cords at each end it is fixed at the proper degree of tension behind. A similar strip of calico passes across the back on a level with the point of greatest curve. This is the "traction-band." If the projection be very sharp and angular, it is well to make a slit, lengthwise as regards the belt, two or three inches long, so that one of the laps may lie above, the other below the most prominent vertebra; a cord secured to both ends of this forms the whole into a loop, into which is hitched the hook of the system of pulleys. These two strips of calico would always crumple up and run into ropes as soon as tension comes on them unless prevented, which is easily done by having at hand four strips of common soft wood a little longer than the belts are broad. They are to be placed outside the calico pretty close to the patient's body, one on each side, and into them through the belts, and just at their edges, are thrust surveyor's pins. Lastly, a one-inch-wide loop of webbing, properly padded, passes across the manubrium sterni under the axilla on each side, and is secured by a cord running through a single pulley at proper tension behind. This is termed the "lanyard." The surgeon begins by making very slight traction by means of the system of pulleys, observing if the tension of his other cords is correct, and places the spine in proper position; if not, it can easily be altered by means of the single pulleys through which the cords run. All being correct he increases the tension, and slips between the laps of both traction and counter-traction bands a board of wood, from ten to twelve inches long, in order to prevent lateral pressure on the thorax and abdomen. He now increases traction up to the desirable point, recollecting that the Astley Cooper system of pulleys multiplies his manual force by six. When as much traction as he may deem safe has been attained, he fixes the pulley cord by twisting or knotting it to the loop of the traction belt, thus causing the spine to be immobile during application of the jacket.

As this sitting position and slight restraint are either not at all or very little fatiguing to the patient, the next procedure need not be hurried. Moreover, in order to insure greater hardness and durability to the jacket, some colloid may advantageously be mixed with the water in which the bandages are soaked. The best and most convenient material, in the author's opinion, is liquid glue. About a teaspoonful to the quart of water causes the plaster to set very firm and hard in from twenty minutes to half an hour, according to the warmth of the room. In winding on the bandages those parts of the traction and counter-traction belts which lie close and tight to the patient's body must be included and covered in the turns; those parts which project and stand away from the trunk are left out. By putting on the bandages, not straight, but somewhat obliquely, the chest and abdomen may be covered, with the exception of some little triangular spaces lying under the shelter of the projecting parts; these are afterwards dealt with.

When the plaster has become firm the traction should be slowly relaxed and the calico belts cut away about three inches from the trunk, and any little roughness in the angle where they begin to project removed. Then the triangular interspaces should be wetted and covered with plaster soaked in the gluey water. The calico lappers (the three inches not cut away) are then laid over the newly-applied plaster, and covered by rubbing into them the same material.

If the surgeon has to deal with a dorso-lumbar, or with simply a lumbar kyphosis, the lower belt becomes the traction band, passes to the front, and is attached to the pulleys; the upper belt is then the counter traction-band, passing across the front of the chest as high up as one wishes, and is secured behind. No lanyard is required.—*London Lancet.*

ON THE SPIDER-NÆVUS.—I wish to describe a form of nævus with which I have long been familiar, but which has, I think, not as yet received much special recognition. Its peculiarity consists in that it has a distinct centre, from which branches radiate in all directions. Its centre is very small, but is so definite, and apparently so active in filling its tributaries, tha

it might be compared to a minute heart. The size of the nævus is rarely greater than that of a fourpenny-piece or a sixpence. The condition of branching out from the centre suggests a resemblance to the small body and longs limbs of some insects, and thus I have been in the habit of naming the whole the "spider-nævus."* If you put the finger on the middle of one of these nævi it may be completely emptied with but slight pressure, but the refilling when the finger is removed is instantaneous. The "spider-nævus," is never congenital, nor have I, so far as I can remember, ever seen it in very young children. After the age of five, however, it becomes common, and it is far more frequent in young persons than in adults. I have, however, recently destroyed a nævus of this kind, and of very well marked characters, on the temple of a gentleman of thirty-two, who held that it had been present only two years. Most of the cases which I have treated have been in young girls between the ages of seven and fifteen. I have seen far fewer in boys, but this may be because the disfigurement is less thought of in them. By far the most usual position of this nævus is the tip of the nose, but it may occur on any part of the face, and they are not unfrequently multiple. I have treated many of them, mostly, I think, on the children of my professional friends. It is sufficient to destroy the centre by a light touch of nitric acid. The limbs of "the spider" will usually afterwards shrivel; if they do not do so, they also may be lightly pencilled out with caustic. It is essential not to do too much at first, or a scar may be left more disfiguring than the original stain. The operator should bargain to be allowed to use the caustic several times if necessary rather than do too much at once. The "spider-nævus" always begins at its centre as a little red spot. It tends to grow, that is, to develop longer and longer limbs, for a year or two after its commencement, but not, I think, indefinitely.

It might be of interest to speculate upon its anatomical peculiarities. I have little doubt that, although not itself usually perceptible at time of birth, it takes its origin in congenital peculiarity of structure. That its centre is in some slight degree pulsative seems highly probable. It is in the possession of this definite centre that it differs from all the other forms of nævus.—*Jonathan Hutchinson in Archives of Surgery.*

* I am aware that in using this name I am only reviving one which was familiar to our ancestors. They had a "Nævus araneus." The name has, however, lapsed, and I am not acquainted with any definition which was ever applied to it. It may possibly have been used for exactly the same condition as that to which I now wish to apply it. If so, however, I have quite failed to find in the older surgical works any parallel description.

NOTES ON QUINSY.—Is there any connection between quinsy and gout, or between quinsy and rheumatism? Perhaps the latter is a more likely association. A lady who was liable to attacks of mixed rheumatism and gout, and who was also liable to quinsies, told me that she thought she usually had a quinsy just before her attack of rheumatism. My coachman, who has suffered from severe and definite attacks of gout in the great toe, is liable also to quinsies, but we have not observed any especial association between the two. The clinical history of quinsy is worthy of more attentive study than it has yet received. It is usually a very definite malady, differing entirely from all other forms of sore throat. It does not occur in conditions of debility, but to robust and healthy persons, and it is not, I think, associated specially with large tonsils. Only some persons are liable to quinsy, and those who are so have repeated attacks, each one just like the other, and usually with very long intervals between them. In the case of my coachman, above referred to, an interval of ten years of entire immunity had occurred. He has just passed through a very sick attack with an abscess in each tonsil, and such swelling as for a time almost blocked the throat. I believe that quinsy rarely begins simultaneously on the two sides, but that it rarely fails of being symmetrical in the end. One tonsil takes the start, and the other usually follows after a few days or a week. This was very definite in the case of my coachman, in whom I have just been studying the phenomena of the disease. He came to me first with a very hard swelling just above his left tonsil, and without the slightest affection of the other, and it was not until the first was on the point of breaking that the other tonsil followed in an exactly similar course. Acute and well-marked attacks of quinsy pass through definite stages, and subside completely after the abscess has given way or been opened leaving no chronic disease behind. It is very

important to seize the right time for incisions in quinsy. They ought not to be made until the abscess is ripe, and they then give wonderful relief to the patient.—*Jonathan Hutchinson in Archives of Surgery.*

ON CAUSES OF DEATH IN MIDWIFERY.—The statistics of midwifery, and the causes of death after childbirth, are not without their interest for the operating surgeon. To a considerable extent the same kind of risks are encountered after delivery as after a large operation wound, and the same kind of precautions are needed.

My friend Dr. Aveling, one of the highest authorities on these matters, assures me that in spite of all modern improvements in practice the ratio of mortality after parturition in English practice has not been reduced lower than one in two hundred. The chief triumphs of recent days have occurred in the reduction of mortality in lying-in institutions. In private practice it is probable that for long the ratio has not been higher, and that no great change has resulted recently. It would appear, to judge from the statistics of individual practitioners, that it is very difficult even under the most favorable circumstances to beat the record.

I have before me a number of the *New Zealand Medical Journal* which contains the statistics of 2,590 cases occurring in the practice of one surgeon (Dr. Sealy). They give a mortality of 1 in 259, being just a little better than the average. It will be seen from the following list of causes of death that something of the nature of puerperal fever claimed about half.

1 from scarlet fever, 11 days after confinement.

1 from acute pericarditis, 2 days after delivery.

1 from uterine inflammation and fever, 18 days after.

1 from post-partum hemorrhage, half-hour after delivery.

1 from the effects of hemorrhage, 2 days after delivery.

2 from puerperal fever, each 9 days after delivery.

2 from typhoid fever, 12 and 10 days after respectively.

1 from bronchitis, 3 days after. (There was no particular temperature, and nothing septic in this case.)—*Jonathan Hutchinson in Archives of Surgery.*

HERPES AFTER-PAIN—ITS SEVERITY AND PROLONGED DURATION IN THE AGED.—All will agree, I think, in the opinion that the severity and duration of herpes after-pains are usually in ratio with the age of the patient. Young persons do not suffer from after-pain from shingles. In old people the pain may last for years. Of this the following case is, amongst many others, a good example.

Mrs. S——, an old lady of 70, suffered from herpes zoster a year ago. She avers that she is still never free night or day from a distressing aching pain in the parts which were affected (ear, neck, and shoulder). The pain does not now shoot and sting as it used to at first, but is rather an unbearable ache. Her nerve pains did not begin with any severity till the herpes spots were healing. This statement applies only to her skin, for the first symptoms which drew her attention to the eruption was a severe pain in the ear. She asserts that she has had earache ever since. I saw her in her first instance on June 16, 1889, at her own house, when she was just recovering from influenza. She was then in bed, and suffering so much from the herpes after-pain that she could not bear to be examined, and could scarcely speak to me. Since that she has visited me several times. She is a cheerful person, inclined to make the best of things, and she has now regained very fair health, but her complaints about the pain are incessant, and she will sit and weep during her visit to me. She says that it entirely prevents sleep at nights, and compares it to a gimlet boring into the ear. From the ear it passes down to the clavicle and tip of shoulder.

This is perhaps the most severe case that I have seen, but I have observed not a few which closely approach it. I have known several in which herpetic after-pains made the remainder of the patient's life a state of misery. They were all in old persons. Quinine and aconite are the most useful remedies, but I have had no triumphs.—*Jonathan Hutchinson in Archives of Surgery.*

THE HYGIENE OF THE TEETH.—The value of preventive measures against the attacks of disease cannot be too strongly insisted upon, and one class of case where these measures are,

to a great extent, within the control of the individual is in regard to the teeth. All caries of the teeth begins from the outside, no such thing as internal caries having ever been demonstrated; hence, if the surfaces could be kept absolutely clean, no decay could take place, however poor the texture of the teeth. This is, of course, impossible, but much towards such a desirable end can be attained by attention to hygienic rules. Parents often ask their dentists and medical attendants with reference to their babies: "When ought teeth to be cleaned?" The answer assuredly is: "As soon as there are teeth." A very small toothbrush charged with some precipitated chalk, flavored with an aromatic drug to make it pleasant, is perhaps the best means—not a towel, which only removes the secretion from the labial and lingual surfaces and not from between the teeth where decay is most rife. Yet how few children's teeth are so treated, and how rarely the habit of doing it for themselves when they are old enough is inculcated. But, if it be acquired, the very desirable result is likely to follow of an immunity from dental trouble—at all events to any large extent. Later on something more can be done by passing a piece of waxed dental floss silk, which can be obtained of most chemists, between the teeth every day, and the value of this can be easily demonstrated after thoroughly using the toothbrush by passing the silk between the teeth, when a certain amount of accumulated matter will be brought away. "Do toothpicks do harm or good?" is another question often asked. They may do harm if abused, undoubtedly, by causing irritation of the gum between two teeth and its subsequent absorption; and, if made of wood, splinters are liable to be left behind, which have, in many recorded instances, caused even the loss of a tooth; but used judiciously they are of great value in routing the attacking forces in caries—namely, accumulations of food and mucous secretions. It has been urged against them that they might dislodge a stopping. But if a stopping is so insecure it must be faulty, and the sooner it is replaced the better, for decay, due to the impossibility of keeping the surface clean, must be going on underneath it.—*Lancet.*

REMOVAL OF BOTH OVARIES IN THE THIRD MONTH OF GESTATION; DELIVERY AT TERM.—An interesting communication by M. Polaillon to the Académie de Médicine has reference to a woman who, in spite of a double ovariotomy performed in the third month of pregnancy, was, nevertheless, safely delivered at term. The history of the case is briefly as follows: First symptoms of the existence of an ovarian cyst appeared at the age of twenty-three, the patient being nulliparous. At the age of twenty-nine, menstruation having ceased for several months and symptoms suggestive of early pregnancy having appeared, severe pains in the abdomen suddenly developed. Examination revealed the presence of an enormous ovarian cyst, probably suppurating, the state of the patient being so serious that, despite the suspicion of pregnancy, it was decided to perform ovariotomy at once. At the operation M. Polaillon came upon a large cyst of the left ovary, adherent to the intestine and to the fallopian tube of the same side. The adhesions were ruptured, the proceeding giving rise to profuse hemorrhage. The left ovary having been removed, it was found that the right tube was the seat of the hemorrhage, and that the right ovary, which had attained the size of an apple, was likewise affected with cystic degeneration. The right organ was in its turn removed. Recovery proceeded satisfactorily and the woman was in due time delivered, the labor presenting no unusual features and the placenta being normal. The cicatricial line was not injuriously distended during the evolution of pregnancy. The lesson deduced from this case by M. Polaillon is that pregnancy may continue after the removal of the upper portions of the broad ligaments and despite the interference with the uterine and placental circulations entailed by the suppression of the superior uterine blood-vessels. He attributes the excessive hemorrhage which occurred during the operation to the extra vascularity of the parts due to the gravid condition of the uterus.—*Lancet.*

ALUMINIUM is to be used in the construction of artificial limbs, a use to which it seems to be particularly well adapted owing to its great strength and lightness.

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, SEPTEMBER 16, 1892.

DIET IN TYPHOID FEVER.

It is admitted now on all hands that medicinal treatment plays a secondary *role* in the management of enteric fever, and that the nursing, with its two main functions of feeding and bathing, plays the primary part in saving the patient. The feeding of a fever patient, of course, is now, since the days of the famous Irishman Graves, accepted as necessary but in no one of the duties of the physician is more careful discrimination necessary than in the proper selection of diet, both as to kind and as to quantity. Dujardin Beaumetz says: "The best treatment of typhoid fever is a good physician." There are certain general principles bearing on the case that seem to need only bare statement to secure general acceptance, and they apply mainly to the management of the acute stage of a continued fever, the stage of convalescence demanding management so different that in the case of typhoid some one has said that convalescence from typhoid fever is a second and different disease. These general principles may be applied with the acute stage of typhoid fever in mind. First, the great increase in the excretion of urea shows great wasting of the albuminous tissues, and either albuminous or albumen-saving material must be supplied. Secondly, the pyrexia seriously diminishes the capacity of the cells for assimilation of the albumen-bearing fluids in which they are bathed, even were these fluids present in the normal way, which they are not, owing to the constant disturbance of the digestive and absorptive powers of the intestinal tract. So that while the old practitioner who starved his fever patient fell into Scylla's clutches and made no attempt to repair tissue waste, the modern one, if not careful, falls into Charybdis' and stuffs his patient, preferably with milk, overloading the digestive canal, whose functions are seriously impaired, and often greatly aggravating the restlessness, fever, diarrhœa, and vomiting of a patient whose condition may be in a single hour greatly improved by a large enema of gruel to remove the sour, offensive curds from the large intestine, or by the vomiting which relieves the overloaded stomach.

It may safely be said that one had better be forbidden the use of milk at all in typhoid than abuse it. And to lay down a routine rule, and say that all typhoid patients must take somehow at least two quarts of milk per diem is bad practice. Idiosyncrasy exists among the well, and is heightened, or perhaps first called into existence, in the sick, and rather than make a rule such as the above the physician should instruct the nurse to keep for his inspection, well covered and untreated with antiseptics, one dejection every day, that he may judge by inspection as to the digestion of the milk he is giving. Another common error is the idea that none but absolutely fluid food may be given. It is forgotten that "digestion is always a process of liquefaction," and that milk turns solid—at least the solid parts of it are aggregated into lumps by the action of the lab-ferment. Yet another point to be borne in mind is the increased need of water. In addition to milk and other fluid foods, water should be regularly given, either pure or mixed with the milk. Eighty ounces is the minimum amount of water necessary in one form or another per diem. And in the matter of both food and drink the patient's wish cannot be taken as a guide, since appetite fails early, and even thirst ceases to be felt when the need is greatest. Not more than two hours should elapse between times of feeding, and water is a food most nutritious to one dying for lack of fluid in the tissues. Making milk the main stay during the acute stage, and giving not more than one quart on an average daily of unskimmed milk, the deficit in albumin is to be made up by meat juices in various forms. If skimmed, more milk may be given. It may be in any case diluted with lime-water (a half ounce to four ounces of milk), with a

little barley-water, with any effervescing or alkaline table-water, and flavored, if the patient prefer it, with a little coffee-essence, vanilla, or similar agent. Of course the peptonizing powder is most valuable. As regards the meat juices, the first resort is the old, familiar beef-tea, chicken or mutton broth. These may, if prepared in the usual way, aggravate diarrhœa. They should be made by the cold process, with hydrochloric acid, that the albumin and gelatine may be really extracted, not coagulated *in situ* by the hot water in which the meat is usually placed. They should be *consommés* as thin as water, and flavored by hanging in the fluid a little bag with such vegetables as minced carrot, parsnip, celery, sage, savory, etc., adding both flavor and vegetable juices to the dish. This may be given twice daily. There are many preparations of meat peptones, the more recent seeming to be far preferable to many of the old ones. They are familiar by name, without invidious selection, and should be tried, both for their own value and as alternatives to the wearisome milk diet. Gelatine in any form is a valuable albumin-saving agent, and any of the wine-jellies may be sparingly and tentatively used. The best is milk-jelly, peptonized milk having added to it while warm the requisite amount of gelatin, and being flavored with rum, brandy, wine, etc. It may be given cold or warm, once daily or every other day. According to some, egg may be given if uncooked, or the raw taste may be removed by breaking the egg and rapidly stirring it in a thick delft cup which has been immersed in boiling water, the heat retained in the ware being enough to lightly cook the egg. Starch in any form is undesirable. Clinical experience shows its indigestibility, and theoretically the pancreatic secretion necessary for its digestion is probably as absolutely suppressed as the saliva undoubtedly is. So that gruel, custard, etc., are inadmissible though the slight amount of soluble starch in such a fluid as barley water does no harm.

During convalescence the difficulty is much increased, especially in private practice, by the clamorous appetite of the patient. The main thing to be borne in mind is the greatly enfeebled functions of the gastro-intestinal tract, and no fast rule can be given as to the number of days of normal temperature that may elapse before adding to the diet list. The slight elevation of temperature that accompanies the digestive process is not to be taken as an incipient relapse, but must, of course, be kept within bounds and watched. Excellent authorities set the limit at two days of normal temperature, others as much as twelve. The state of the digestive functions, as determined by the progress and severity of the acute stage, should be the guide in making up the new diet list. The first addition might be one lightly boiled or poached egg, or a custard with little starch, or a little milk-toast. If no ill results, the same the next day, with, for dinner, some chicken or other broth, thickened with well-boiled rice, not with raw starch, and perhaps, in addition, some corn starch the next day. Milk must still be given in plenty. Soon a few oysters, with the hard adductor muscle removed, may be given, then small fragments of white meat, and gradually the meats and mashed potatoes reached, not earlier than the tenth day. Before this a moderate amount of good wine or bitter ale or porter may be advantageously given, as a stimulant and digestive tonic.

ADMINISTRATION OF CHLOROFORM IN THE PRESENCE OF A NAKED FLAME.

We often hear of the dangers of administering ether, in the presence of a naked flame, because it is so highly inflammable; and, in the same connection, it is generally supposed that the use of chloroform under such circumstances is quite safe. It has been pointed out, however, by Patterson and Martin, of England, and Zweifel on the Continent, that such ideas about chloroform are incorrect. Dr. Charles Martin recently read a paper on the subject before the Queen's College Medical Society (Birmingham *Medical Review*) in which he refers to the effects of chloroform when administered half an hour or more in the presence of an open flame such as gas jets. It produces in those present a dry, spasmodic cough, becoming to some quite serious, smarting of the eyes, pungent odor with stinging sensation in the nostrils, and a sense of oppression in the chest. He has noticed that in some cases the patient's condition be-

comes very serious, although he had never seen death ensue from such causes.

The proper cause of such symptoms was not for some time suspected, but was thought to be an impure carbolic acid spray, the use of impure chloroform, or fumes from a gas stove. Investigations in each case gave negative results. Finally, it was proved that the evil results were due to the decomposition of the chloroform in the presence of the naked flame and the formation of free hydrochloric acid. Dr. Martin thinks it is the presence of this hydrochloric acid that produces the irritating cough, the acrid odor, and the other unpleasant symptoms before described. The character of the flame does not appear to signify, as similar effects have been observed in the presence of gas and oil flames. The bad effects are not, as a rule, observed until the chloroform has been administered half an hour. The fact remains, however, that chloroform is safer under such circumstances than ether; but we should remember that when chloroform is administered for any length of time it is desirable to have as large a room as possible, and free ventilation.

CANADIAN MEDICAL ASSOCIATION.

We hope the next meeting of this association, to be held at Ottawa, September 21 to 23 inclusive, will be largely attended. The president, Dr. J. L. Bray, has shown a commendable zeal in his preparations for the event, and has been cordially assisted by the secretary and other officers. It is expected that a very important question will come up for discussion with reference to the place of meeting in the future. It is considered by many that the peripatetic system has seriously interfered with the success of the organization. There is, of course, nothing new in such consideration; but some are so strongly impressed with the gravity of the situation that they will propose to make a radical change, and, in the future, hold all the meetings in the same city. If such views prevail, it is likely that Ottawa, the capital of the Dominion, will be the place selected.

Mosso has determined as the results of a series of experiments that the brain is the warmest part of the body.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

The fifth annual meeting of this association will be held in St. Louis, Sept. 20, 21, and 22, under the presidency of Dr. A. Vander Veer, of Albany. It is unfortunate that it takes place at the same time as the meeting of the Canadian Association at Ottawa; and, as a consequence, the attendance of the Canadian members will not be large. We earnestly hope the mistake will not be repeated in future years, as our American brethren have been more than kind to those from Canada who have had the pleasure of attending any of the meetings of this young but vigorous society. Our able and genial friend, Dr. W. Warren Potter, of Buffalo, the indefatigable secretary, tells us this year's meeting will be a grand success.

Book Reviews.

Book on the Physician Himself, and Things that Concern His Reputation and Success. By D. W. Cathell, M.D. New tenth edition (author's last revision). Thoroughly revised, enlarged, and rewritten. In one handsome royal octavo volume. 348 pages. Bound in extra cloth. Price, postpaid, $2 net. Philadelphia: The F. A. Davis Co., publishers, 1231 Filbert Street. Toronto: J. A. Carveth & Co.

This is not only a useful book, but also a very readable one. It gives the general physician good advice with reference to many points, but especially in regard to choosing a location and earning a reputation by honorable methods. The author considers that it is as necessary for the most skilful physician to possess a certain amount of professional tact and business capacity as it is for a ship to have a rudder. He tells us that, as physicians, we should make skill in preventing disease our central thought and our chief reliance, and, as men and brethren, should discharge each and every duty to our great Master's entire family, at all times and in all places, with fidelity and honor. The work has met with remarkable favor in the United States, and we see no reason why it should not prove quite as acceptable to Canadian physicians.

The Year-Book of Treatment for 1892. A critical review for practitioners of medicine and surgery. In one square 8vo. volume of 491 pages. Cloth, $1.50. Philadelphia: Lea Brothers & Co., 1892. Toronto: J. A. Carveth & Co.

The "Year-Book of Treatment" is the joint product of twenty-one physicians and surgeons: Barclay J. Baron, M.B., Stanley Boyd, F.R.C.S., J. Mitchell Bruce, Alfred Cooper, F.R.C.S., George P. Field, M.R.C.S., Archibald E. Garrod, M.D., Handfield Jones, M.D., Reginald Harrison, F.R.C.S., Ernest Herman, M.B., Ernest Lane, F.R.C.S., Robert McGuire, M.D., Malcolm Morris, F.R.C.S.E., Edmund Owen, F.R.C.S., Sidney Phillips, M.D., Henry Power, F.R.C.S., C. H. Ralfe, M.D., E. S. Reynolds M.D., James Ross, M.D., E. M. Skeritt, M.D., W. G. Smith, M.D., and W. J. Walsham, F.R.C.S., who give a classical epitome of the medical literature of the last year in a convenient and practical shape. The distinguished contributors have done their work well, and their publishers offer to the profession a very valuable little book.

Personal.

DRS. J. T. DUNCAN and J. C. PATTON, of Toronto, are now in England.

DR. J. E. GRAHAM has returned from his two months' holiday, most of which was spent in Switzerland, as our readers know from his letter published in last issue of THE PRACTITIONER.

DR. JAS. F. W. ROSS, of Toronto, has been elected one of the Honorary Presidents of the International Congress of Gynecology and Obstetrics, to be held in Brussels, September 13 to 18.

DR. BERGIN, of Cornwall (Surgeon-General), and Drs. Strange and Ryerson, of Toronto (Surgeons), have been elected Honorary Members of the Association of Military Surgeons of the National Guard of the United States.

PROF. OSLER, who was in Toronto a few days ago on his return from Europe, told us the meeting of the British Medical Association was an excellent one; but he was especially enthusiastic in his praise of the work done in the pathological section, under the presidency of Victor Horsley.

Therapeutic Notes.

MALARIA.—Dr. Samuel Wolfe *(Amer. Therapist)* speaks highly of resorcin, in the following combination, in the treatment of obstinate malarial toxæmic conditions:

℞ Resorcin.....ʒ iii
Tr. eucalypti.....fl ʒ i
Syr. limonis.....fl ʒ ii
Aquæ.....fl ʒ i

M. ft. solut.—Sig: Teaspoonful three times daily.

CYSTITIS.—M. de Laval (through Boston *Med. and Surg. Journal)* recommends the following formula:

℞ Ext. pichi fluid.....fl ʒ i
Potassii nitratis.....ʒ i
Syr. simplicis.....fl ʒ iii

M. ft. solut.—Sig: A teaspoonful every three hours.

EXFOLIATIVE MARGINATE GLOSSITIS.—Dr. Besnier *(le Bulletin Médical)* uses the following ointment:

℞ Cocaini hydrochlor...0.05
Bals. Peruv.....
Acid borici.....aa 1.0
Petrolati.....30.0

M. ft. ungt.—Sig: Apply locally twice a day.

SEAT WORMS.—Minerbi (*Jour. de Med. de Paris*) reports good success in treating children for seat worms with naphtha used as a rectal injection. This is his formula:

℞ Naphthalini..... 1.0— 1.5
Olei olivar.....40.0—60.0

M. ft. solut.—Sig: For a rectal injection.

ARTIFICIAL CARLSBAD SALT.—The following formula is given in *Archiv. de Pharm.*:

℞ Sodii sulphatis (cryst).55.56
Potassii sulphatis..... 1.11
Sodii chloridi.....10.00
Sodii bicarbonatis....33.33

Mix. 100.00

—*The Med. Fortnightly.*

THE THERAPEUTIC USES OF IRON.—The tonic and hæmatinic properties of iron were well known to the ancients. The old way of administering this metal was very curious. The metal being very much used in the pre-

paration of weapons of warfare, and Mars being the god of war, Mars became the patron of iron; and very frequently in old books we read of the "martial preparations," by which is meant preparations of iron, and the mode of administering them was to put a sword into a water-trough and allow it to lie there and rust, and to let the people drink of the water. Of course, it was a very mild chalybeate water that could be got in this way. But, still, very mild preparations of iron, if continued for a long period of time, will produce a very marked effect; and distinct results were obtained in ancient times from this very mild way of giving iron.—*Lancet.*

CHLOROSIS TREATED BY SULPHUR. — Dr. Schulz calls attention to the value of sulphur in certain cases of anæmia and to the excellent results obtained by the use of sulphur waters in malarial cachexia. He draws the following conclusions: (1) In cases of pure chlorosis in which iron proves inefficient, the general condition is decidedly improved by sulphur. (2) After the administration of sulphur has gone on for some time, treatment with iron can be commenced and continued with success. (3) In cases of chlorosis complicated with catarrhal and inflammatory conditions of the digestive track, sulphur is contra-indicated.—*Berlin klin. Wochens.*

ARSENIC IN LEUKEMIA.—At a meeting of the Clinical Society of London, Drew (*Lancet*, 1892, No. 3588, p. 1244) presented a case of leukemia in a man in which after a course of three months of treatment with liquor arsenicalis in gradually increasing doses up to one hundred minims daily the greatly enlarged spleen became much reduced in size, while the proportion of colorless blood corpuscles diminished from 1 : 14 red to 1 : 400. The number of red corpuscles was increased, but the proportion of hemoglobin underwent but little change.—*Medical News.*

CREASOTE IN TUBERCULOSIS. — Penrose (*Medical Record*, April 9, 1892) reports upwards of one hundred cases of pulmonary tuberculosis which have been treated with creasote. All of the cases improved, and though none were cured, owing to the advanced stage of the disease, many of the patients are now at work who would, in all probability, have died but for the use of the drug. He thinks it most important that pure beechwood creasote should be used, and the dose gradually increased.

Miscellaneous.

RESOLUTION OF THE MEDICAL PRACTITIONERS OF OTTAWA.—At a meeting held this 1st day of August, 1892, of the Ottawa members of the Bathurst and Rideau Medical Association, which includes all the registered medical practitioners resident in the city of Ottawa, the following resolution was carried unanimously:

Resolved: That this meeting having been officially informed of the action of the Dominion Government whereby by Order in Council "Every qualified medical practitioner whose name is registered in the Medical Register of the province in which he resides is appointed an authorized medical practitioner for the purpose of issuing medical certificates as required by the Civil Service Act," they desire to express their full appreciation of the courtesy thus extended to the members of the medical profession throughout Canada; and they believe also that this course is in the interest of the members of the Civil Service, equitable towards the members of the medical profession, and equally protective to the interests of the Government, as compared with the former regulation of having only one authorized physician in each locality.

Resolved: That this meeting is of the opinion that it would be well for the Government to adopt and have printed a form of blank medical certificate to be filled out by physicians giving such to civil servants who are ill and under their care.

Resolved: That whilst the members of this Association desire to express the opinion that there is no body of men who would more readily condemn a physician for wilfully issuing an unwarranted and unworthy medical certificate than the members of the medical profession, and whilst they declare that such a physician would be deserving of the severest censure and his name should be erased by the Government from the list of authorized medical practitioners, yet inasmuch as there are cases where the trained medical mind is enabled to discover slight symptoms of disease, indicating serious possibilities in the near future, where divulgence might thwart the chance of cure, together with the fact that the lines of professional secrecy are inelastic and demand invariably the most honorable observance, it would be but justice that before any physician's name is removed by Order in Council from the list of authorized medical practitioners under the Act for reported irregularity

he should have the right extended to him of explanation and of defending his action.

Resolved: That a copy of this resolution be sent to the Dominion Government, through the Honorable the Premier, Sir John Caldwell Abbott, and that a copy be also sent to all the medical journals in Canada.

A. F. ROGERS, M.D., *President.*
H. B. SMALL, M.D., *Secretary.*

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—A very full program is announced for the coming meeting of the American Electro-Therapeutic Association, which is to be held in New York, at the Academy of Medicine, 17 West 43rd Street, October 4th, 5th, and 6th. There will be two interesting discussions, one upon "The Relative Fœticidal Value of the Different Currents and their Application to Ectopic Gestation," to be discussed by many prominent gynecologists and electricians, and another upon "Cataphoresis and its Practical Application as a Therapeutic Measure." Papers are announced by Drs. Geo. J. Engleman, Wellington Adams, and Geo. F. Hulbert, of St. Louis; Wm. F. Hutchinson, of Providence, R.I.; Franklin H. Martin, of Chicago, Ill.; A. Lapthorn Smith, of Montreal, Canada; R. J. Nunn, of Savannah, Ga.; Thomas W. Poole, of Lindsay, Ontario; C. Eugene Riggs, of St. Paul; W. J. Herdman, of Ann Arbor, Mich.; D. S. Campbell, of Detroit, Mich.; G. Betton Massey, of Philadelphia; Henry D. Fry, of Washington, D.C.; H. E. Hayd, of Buffalo, N.Y.; J. H. Kellogg, of Battle Creek, Mich.; C. G. Cannaday, of Roanoke, Va.; Ernest Wende, of Buffalo, N.Y.; and Wm. J. Morton, Augustin H. Goelet, A. D. Rockwell, Landon Carter Gray, Robert Newman, Ephraim Cutter, Frederick Peterson, G. M. Hammond, F. Van Raitz, of New York, and many others. Dr. J. Mount Bleyer will give an instructive lecture with demonstrations, entitled, "The Phonograph and Microphonograph, the Principles Underlying Them, and their Uses in the Sciences." In connection with the meeting there will be an exhibition of modern medical electrical apparatus, all the prominent manufacturers being represented.

LARGE FEES.—A Chicago physician has received $2,000 for his services in a case of intubation for diphtheritic laryngitis. The parties disputed the bill for six months, and at last put it in arbitration. The full charge was allowed and promptly paid. A New York physician was not so fortunate. His bill was $2,500 for ten days' attendance on a case of typhoid fever in a southern town. The matter was sent to a jury, who awarded the doctor $1,500. These cases have both been somewhat *causes célèbres*, and have led to many satirical remarks about doctors' fees. There may be extortionate charges occasionally; but, take it as a whole, the physician is poorly paid for the work he does. He never accumulates riches, and is generally fortunate if he saves enough for his old age. Medical servicesare worth more than in former years, and should be better paid.—*Medical Record.*

A STATUE TO RICORD.—The world owes a debt of gratitude to the man who, by his labors in the investigation of syphilitic diseases, confirmed (in 1838) Benjamin Bell's views (dating from 1793) as to the non-identity of gonorrhœa and syphilis. It was not to be expected that Ricord's name and fame would be allowed to remain unrecognized, and the Paris municipal council have authorized the placing of his statue on a spot in the Boulevard de Port Royal, exactly fronting the Hôpital du Midi, the scene of his labors and teaching for thirty years.—*London Lancet.*

FEMALE PHYSICIANS AND THE BRITISH MEDICAL ASSOCIATION.—A resolution was passed at the recent meeting of the British Medical Association at Nottingham expunging a section of the articles of association that provided that no female should be eligible for election as a member of that association. The question was first agitated in 1878, when it was decided, by a large majority, to make no change.

THE following are the delegates to the Dominion Medical Association, which convenes at Ottawa, September 20th, from the Ontario Medical Association: Drs. R. W. Hillary, president; J. E. Graham, Chas. O'Reilly, and D. J. Gibb Wishart.

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THE

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TORONTO, OCTOBER 1, 1892.

Original Communications.

PRESIDENT'S ADDRESS DELIVERED AT THE MEETING OF THE CANADIAN MEDICAL ASSOCIATION HELD IN OTTAWA, SEPTEMBER 21st, 1892.

BY JOHN L. BRAY, M.D., F.R.C.S.K., CHATHAM, ONT.

GENTLEMEN,—Allow me, in the first place, to offer you my most heartfelt thanks for the great honor you have conferred on me in electing me President of the Canadian Medical Association; and while I appreciate your kindness and feel proud of the distinction, the high honor only makes me more conscious of my inability to fill the position with credit to the profession and satisfaction to myself. Following, as I do, my immediate predecessor, Dr. Roddick, only makes this more obvious; but I trust you will extend to me a helping hand, and at the same time shut your eyes to my deficiencies.

Now I am not going to deliver a scientific address on medicine or surgery, as that duty has been delegated to those much better able to perform the task than I am, but will take instead a review of medical education and the advances made in that direction since the birth of this association twenty-five years ago; secondly, say something about medical reciprocity between the provinces and the barriers that now exist to prevent this, and how they may be removed. And what time could be more fitting or what place more appropriate for such a retrospect? We meet to-day to celebrate our silver anniversary, in Ottawa, the capital of our country, on this the twenty-fifth anniversary of its birth. What memories are recalled by a few—and oh! how few they are—that were present when this association was formed a quarter of a century ago! What changes have taken place since then! The magnificent building we now occupy was not then erected. The city of Ottawa was a city only in name; and of the noble men in our profession who were instrumental in forming this society, how many have gone to their long home, and are forever at rest from the cares and anxieties of this world! The reaper Death has year by year since that time been cutting down first one and then another of our members, without regard to age, ability, or position. Since our last meeting we have to mourn the death of Dr. James Ross, who so ably presided over our deliberations two years ago in Toronto, whose kindly smile and friendly greeting we miss to-day, from whose large experience we have all more or less profited, and whose wise counsels we would all do well to follow. But we have with us to-day Sir James Grant, Dr. Hingston, Dr. Fenwick, and perhaps a few more who were present at the birth of this association.

When we see how our country has grown and developed since that time, it is sad to think that this society has not kept pace with the Dominion, and I trust the remarks made by Dr. Roddick in Montreal last year on this subject will bear fruit, and that in the next twenty-

five years this association will rival in numbers, as it does now in ability, its great neighbor, the American Medical Association, and I hope before we close our labors some steps will be taken by the formation of a committee or in some other way to promote this object.

It will be in the recollection of some present to-day the condition of things as they existed prior to the formation of this society in 1867, and the passage of the Upper Canada Medical Act about the same time. You will remember that there were three licensing bodies in old Canada at that time, independently of the medical schools and universities. The latter were degree-conferring institutions, but they virtually possessed the licensing power, inasmuch as the holder of a degree from any of these bodies was entitled to practise medicine on proving indentity, paying a small fee, and having a license signed by the Governor-General. All he had to do was to send his degree with an affidavit to the Provincial Secretary, when his Excellency, taking for granted that he was fully qualified, having secured a degree from some college or university in Canada or Great Britain, would attach his signature to the provincial license, which enabled him to practise in that or, in fact, any other province; so that in reality we at that time had in Upper and Lower Canada, to say nothing of the other provinces now constituting the Dominion, seven or eight licensing bodies responsible to no central authority, vieing with each other in their efforts to turn out the greatest number of doctors independently of quality. The licensing boards in Canada consisted of the Upper Canada, the Homœopathic, and the Eclectic Medical Boards, all constituted by royal charter, and electing or appointing their members in different ways. The Upper Canada Board was appointed by the Governor-General for life, or during good behavior. How the others were appointed I cannot say, but probably in the same way, on the advice of one or two of the more prominent members of these schools. You can imagine it was not so very difficult to become a full-fledged doctor in those days. The schools and universities fixed their own curricula both for matriculation and professional examinations, and the licensing boards, some of them at least, I believe, required no standard of matriculation at all, and almost none of a professional character; consequently the education required to become a doctor at that time was not of a very high order. So low had the requirements sunk that not only the profession, but the schools as well began to think it was time to make some change, and demand a higher standard. I am speaking now more particularly of Ontario. The first step taken to remedy the then existing state of things was by the Act of 1865, known as the Parker Act, whereby a council was formed who had the power to fix the standard of matriculation as well as that of the medical curriculum. But while they had the right to make a standard, they were powerless to enforce it, no authority being given them to appoint examiners or conduct the examinations, which was left to the colleges as heretofore; and although the provincial board was done away with by this Act, the Homœopathic and Eclectic Boards were not interfered with, which, instead of remedying, rather increased the evil, as the number of licenses from these boards for the next year or two amply testified; and while this Act was an improvement in some respects (being a starting point), it was found to be still very defective. It was felt that the plan of allowing each school to examine its own students, even although the council fixed a standard, did not prevent a great many unqualified men from getting into the profession; for if the curriculum was difficult the examinations were in many cases made easy, and in the event of a student being rejected by his college (which was a rare occurrence) there was nothing to prevent him from going before one or other of the remaining medical boards, and I fail to recollect a single instance where a student taking this course was not granted a license to practise medicine, surgery, and midwifery.

This state of affairs induced the council to consider what steps they should take to remedy this evil, and the conclusion they arrived at was a wise one. They thought that if it were possible to unite all branches of the profession and bring them all under one law, they could then control and direct medical education. In order to do this it was necesssary to give and take, and a compromise was effected with the homœopathics and eclectics, as well as the different medical

schools and universities, whereby the whole profession was united and brought together, and became subject to one central authority, viz., the Medical Council of Ontario, made up of representatives elected and appointed from the general profession, the medical schools and universities, and also from the homœopathic and eclectic bodies. This Act came into force in the year 1868, and gave the council power not only to make the standard of all the examinations, but to appoint examiners to conduct them; and I am happy to say that from that time till the present the standard of medical education has been rising year by year, not only in Ontario, but over the whole Dominion, until to-day in Ontario we have a curriculum standard equal to that existing in any country in the world, and a Medical Act to enforce it which is the envy of the United States, and which England has tried in vain for years to adopt. I am sorry to find that a hostile feeling has risen against the council through some clauses added to the Act in 1891, which feeling I would be glad to see removed. But while I am aware that a few faults are to be found, I am also aware that a great many virtues exist in the Act as it now stands, and it behooves the whole profession to see that no action is taken to impair its usefulness, detract from the dignity or lessen the influence of the Medical Council, which is the safeguard of medical education in Ontario, and which exerts an influence over the whole Dominion; for every province would suffer if the Ontario Medical Council were abolished and the old system of free trade resuscitated. I cannot believe that there is one who has the welfare of the medical profession at heart in this country who would wish to see us return to this condition, and for this reason I would ask those who are opposed to some clauses in our Act to pause and consider well before they do anything to embarrass the council or vitiate the Act, and by so doing play into the hands of the charlatans both in and out of the profession. As it is we stand alone, looked upon by the general public as a close corporation, who do nothing but increase the fees and legislate for our own pockets; and these views are encouraged by a certain class of men who have not the ability to obtain our license, or, having obtained it, branch off in some disreputable way in order to make more money, and victimize the very public whom they profess to champion as against the regular practitioner. Fortunately for the profession and public, we have a clause in the Act to enable the council to purge the profession of such unworthy members, and to punish others who trade on the incredulity of the public by fraudulent practices without being registered. Therefore I reiterate the statement that we must be careful in interfering with the present law, by amending some minor clauses which may be objectionable, that we do not get the whole Act wiped out; and I would suggest here, as I have already done in another place, that the members of the profession in Ontario who are aggrieved at the workings of the Act meet the Medical Council, discuss the whole question, frame such amendments as may be in the interests of the profession and public, and then go to the legislature as a united profession, asking for such alterations in the present Act as they have agreed upon, and I am sure the legislature will grant them. I hope the association will pardon me for this digression, but I speak feelingly, having the interest of the profession at heart, and knowing something of the differences existing between some members of the profession and the Medical Council of Ontario.

Prior to 1867 the matriculation examinations in all our colleges was more a matter of form than anything else, and could be passed at any time before going up for the degree. At the present time it is quite different. Now it is equal to a second-class teacher's certificate, with Latin, physics, and chemistry compulsory, or junior matriculation in arts in any university, with the science course; and the day is not far distant when it will become still higher and eventually reach a degree in arts; and can any one say that this should not be so? A physician, above all men, should be thoroughly educated, for education is a great refiner; and in what calling or profession is this quality more essential than in ours? What scenes we witness, what confidences we receive! In and out of the family circle at all hours and under all circumstances, and always battling with pain, disease, and death. And here it is that the refined physician shows the result of his early training, by soothing pain, curing or relieving

disease, and sympathizing with the bereaved; and, mark my words, it is only the man who thoroughly knows his profession that in the long run reaches the top of the ladder, and who deserves and receives the gratitude of his patients and the esteem and respect of his confrères.

I am indebted to Dr. Pepper, of Philadelphia, and desire to return him my most sincere thanks, for a copy of his address containing a vast amount of information on the subject of medical education, delivered by him a few years ago. In speaking of the system of medical education in the United States (and his remarks would have applied to Canada a few years ago, although not quite to the same extent), he says that if we would learn the truth and know the estimation in which our medical education has of late been held by other countries, it needs only to examine the changes which have taken place in their system of medical teaching, proportionate to the vast advancement in medical knowledge, and then turn to the picture of our own position as drawn by those most competent to depict it. He proceeds to say that in every country but ours, without, so far as I know, a single exception, where a system of medical education can be said to exist, certain general principles will be found embodied in that system. These are, first, a matriculation examination; second, a sufficient length of time devoted to medical studies; third, a careful personal training of each student in all practical and clinical branches; fourth, careful grading of the course; and, fifth, impartial examinations by disinterested individuals. On the whole, these are about the requirements necessary in the Dominion at the present time for a student before receiving the right to practise. Dr. Pepper goes on to say that there are some in this country who would cry out at once that so prolonged and elaborate a course of study as I have mentioned is not necessary in America to produce good practical doctors, but that it can only tend to develop a class of over-educated, supercilious, impractical medical men, too good and fine for the average work of a physician. No frame of mind is more enjoyable than the self-complacent contentment of the optimist who holds the candle of his own excellencies so close to his eye that it dazzles him, and makes him blind to the broad sunlight of truth and progress flooding the world. Such objections as the above might be expected if the elevated system of teaching which I have sketched were adopted only in one or two very old and wealthy countries, for it might then seem to be due to a highly artificial state of society. But when we see that not only the older and more highly civilized and more densely populated countries, such as England, France, and Germany, but in those whose state of civilization and the condition of whose people we should be slow to regard as favorable, compared with our own, as Russia and Spain, in those such as Brazil and Australia, whose forms of government and social system are younger even than our own, and, finally, even in countries which, like Mexico and the republics of South America, we are supposed to regard as only semi-civilized, and where the instability of government and the frequent convulsions of social order would seem to render any fixed and comprehensive educational policy impossible; when we see that in each and all of these a thorough plan of medical education is held essential for the welfare of the community, for the development of medical science, and for the interests of the medical profession itself, it is surely time to consider carefully if we are not sadly at fault in this; and if, while elsewhere the requirements of medical education have been made to keep pace with the growth of medical knowledge, with us they have not been controlled by other and far less proper influences. Now, if we consider the present state of medical science and note the vast advances that have been made during the past twenty-five or thirty years in all of its departments; if we reflect upon the enormous extent of accurate information of minute technical knowledge and of special practical training which is now required to fit a man to practise medicine scientifically, and to render to those sufferers who seek his help the full measure of the benefits which the healing art is now capable of bestowing, shall we be surprised at the careful and prolonged course of study that we find is imposed in all countries but our own upon the applicant for the degree of medicine?

Surely no one can fail to appreciate the enormous importance of having thoroughly trained and skilful physicians.

When overtaken by serious accident or illness, all other means of relief fail, and the most wealthy, the most powerful, the most illustrious must, like the poor and unknown, cast their dependence upon the skill which, under God's guidance, the physician shall display in battling with disease and death. No other study presents difficulties and complexities so great as those which beset the study of medicine. In no other occupation in life are such varied culture of the mind and training of the senses demanded. Yet I learn on inquiry that the average time of apprenticeship to the following trades or callings is: For barbers, three years; for carpenters, printers, turners, plumbers, pattern-makers, at least four years; for machinists, five years; and for pilots, seven years. Can it be that the apprentice must practise five years before he is regarded as a skilled workman, fitted to mend or make machines of iron or brass, and that in this land of intelligence, progress, and common sense one who has studied medicine less than one-third that time may have his license to meddle with and make or mar that most wonderful machine — *man's body* — infinitely complex, gifted with boundless capacities, and freighted with the awful responsibility of a an immortal soul? Can it be that seven long years of pupilage must pass ere the young pilot may be trusted in charge of a vessel to guide it through the crooked, narrow channel, where only the hidden dangers of sunken rocks or treacherous shoals beset him, while in less than one-fourth of that time we profess that one may qualify himself to pilot the most precious craft —a human life—through the long, dark, intricate windings of disease, where at every turn death lies concealed, so close at hand and so difficult to avoid that nothing but the most intimate knowledge of his profession and consummate skill can insure safety? A strange seeming contrast, and yet the following careful examination of the state of medical education as it exists in all the medical schools on this continent, with a few honorable exceptions, fully supports the paradox. He then goes on to give the curricula, course of study required, and methods of examination of most of the medical schools of the United States, and compares them with the colleges of other countries. But I need not follow him further in this direction, and have only introduced his remarks to show the state of medical education as it exists where there is no central governing power having supervision over the different teaching and degree-conferring bodies, as was the case in Canada up to the year 1868. But I am pleased to say that to-day Canada, as a whole, has one of the highest standards of medical matriculation as well as medical teaching to be found in the world; and what we want particularly at the present time is to assimilate the systems existing in the different provinces, thereby making one uniform standard for the whole Dominion.

And this brings me to the second part of my subject, viz., the question of medical reciprocity between the provinces. In reading over the Medical Acts of the different provinces, I find that Ontario is the only one that has a central examining board appointed by the council, before whom every student desirous of practising in that province, no matter from what country he may come or from what university he may have a degree, has to pass. I further find in the Ontario Medical Act this clause: "When and as soon as it appears that there has been established a central examining board similar to that constituted by this Act, or an institution duly recognized by the legislature of any of the provinces forming the Dominion of Canada, other than Ontario, as the sole examining body for the purpose of granting certificates of qualification, and wherein the curriculum is equal to that established in Ontario, the holder of any such certificate shall, upon due proof, be entitled to registration by the Council of Ontario if the same privilege is accorded by such examining board or institution to those holding certificates in Ontario."

I find in the Manitoba Medical Act that the University of Manitoba is the sole examining body for the province, and in that respect comes nearer to the requirements of Ontario than any other, and I see no reason why as long as this remains so reciprocity should not exist between Manitoba and Ontario. Now it appears to me there are just two ways whereby reciprocity between the provinces can be brought about, and these are, first, the repeal of that portion of the British North America Act which gives the various provinces sole control over all educational matters, by taking from them this right

and vesting it in the Federal Government, and the appointment of a Dominion Medical Board; or, secondly, the establishing of Medical Councils for each province, which shall appoint a Central Examining Board similar to that of Ontario, and when this is done let representatives from each provincial council meet, say, in Ottawa, and fix one uniform standard of medical studies to be adopted by all the provinces. Now, as to the first, I thing it is entirely out of the question, and can be put aside as utterly impracticable, as I feel sure the local legislatures would never consent to have the control of the educational system taken out of their hands. As to the second proposition, I see no good reason why it should not be adopted. In all the Provincial Medical Acts, so far as I am aware, full power is given the councils to fix the periods of study, make their own curricula, and conduct their own examinations in the way which to them may seem best. Now, all the colleges and universities in the Dominion, so far as I can learn, require four full years of study from a student before going up for his degree, excepting those of British Columbia, whose council is satisfied with three. The teaching in all these institutions is very similar, so that it would not be a difficult task to make them uniform in this respect. Then all that remains to be done is to appoint a Central Medical Examining Board for each province, to examine and recommend for license all graduates, leaving the universities the power of granting degrees only. I shall make no more suggestions on this point, as committees from each province were asked to meet in this city to discuss this matter fully, and I trust their deliberations will result in bringing about the object we all so much desire.

There is one thing that must always be borne in mind, however, and that is, no matter how or by what means reciprocity is brought about, the standard of medical education must always be advancing. This is something we owe both to ourselves and the public, although the latter are slow to appreciate the sacrifices we are constantly making in their behalf. When will they understand that it is more to their interests than ours that medical men should be thoroughly trained and well educated? These same people would never think of retaining an uneducated and incompetent lawyer to conduct a case when only their money or property was at stake, nor would they employ a poor mechanic to build their houses, nor hire a worthless laborer who was incapable of doing the work entrusted to him; yet they do not hesitate to put themselves under the care of and intrust their health and lives to those travelling charlatans who are without the slightest pretence to a thorough medical training (or as Dr. Campbell, one of the homœopathic members and vice-president of the Ontario Medical Council, puts it, "Those uneducated, incompetent, and dishonest persons who prey on the misfortunes of the sick and distressed; parasites on the profession and plunderers of the people"), and pay enormous fees, and these in advance—such fees that if any reputable physician should dare to charge the one half his bill would be disputed; he would be called an extortioner, and his neighbors warned not to employ him. This is no exaggerated picture, and therefore it behooves us as members of the Canadian Medical Association, having the welfare of the public at heart, to work together not only to elevate the standing of our profession, but to enlighten the public as to who are worthy of their confidence, and to warn them against the incompetent, uneducated, and unlicensed men, as well as the registered quack who sells his license to some foreign institution and robs the deluded people who employ him of both money and health.

In speaking of reciprocity, it has always appeared to me the height of absurdity that in this young country, made up of the different provinces and territories, confederated together under one general government—that in each of these provinces an educated medical man (already registered in one) should be required to pass an examination before being allowed to practise his profession on entering another province, or else be humiliated by being dragged before a magistrate and fined, or sent to prison. What a spectacle it would be and how injurious it would prove were the chief medical officer of one of our transcontinental or inter-provincial railways like the C.P.R. or G.T.R. made to pay a fine for setting a fracture or amputating a limb for some poor unfortunate injured in an accident on one of these roads outside the province in which the medical officer was

registered; or in a case of a suit for damages being brought against one of these companies in any province beyond the limits for which the chief medical officer's registration extended, what would be thought by the public if the court refused to hear his evidence because he was not a registered practitioner in that particular part of the country? Yet as the law now stands in some of the provinces he, in the first instance, could be fined, and, in the second, his evidence would be of no legal value. Under these circumstances I think it the duty of the medical councils of each province to consider this matter fully; and not only consider it, but adopt some means to remedy the evil, injustice, and absurdity of the present state of things.

Let us, then, as members of this National Medical Association, throw aside all minor differences of opinion as to provincial rights and use our influence individually and collectively to attain this object; and, like the two great political parties, who, twenty-five years ago, united for the noble purpose of bringing together under one government the scattered provinces under the British crown in North America into one great Dominion, in whose capital we now meet, so let us assimilate, unite, and bring together the different systems of medical education now existing in these provinces and form one great universal system, with a standard so high that it will carry with it not only the respect and admiration of the people of this country, but secure the recognition it would deserve from the universities and medical councils of Great Britain and the continent; and just as Canada is destined to take her place among the most progressive and enlightened countries of the earth, so shall her sons who are graduates of her universities and registered by her medical councils take their stand among their confrères from the older countries in the world's medical congress, and feel proud to be called Canadians.

A FATAL CURIOSITY.—A weaver in Accrington, England, put a turpentine stupe over his abdomen for the relief of a severe colic. It did not seem to burn as much as it ought, and he struck a match to see what was the reason. The match ignited the turpentine, and the man was burned to death.—*Med. Record.*

RHINOLITHS.

BY DR. PRICE-BROWN, TORONTO.

Until within the last few years the literature to be obtained upon the subject of nasal calculus was very limited. Erichsen, in his work upon "Surgery," 1873, merely gives it a passing allusion; while Bosworth, in his "Throat and Nose," published in 1881, does not even mention it. In his later work, however, issued in 1889, he devotes considerable space to the subject, recognizing its importance, and assigning to it the position in medical science to which it is entitled.

The patency of the nares, both anteriorly and posteriorly, will always render rhinal calculus of rare occurrence. Still, so long as people, particularly children, will continue to put foreign bodies into their noses, some of these will be retained, with the possibility of calcareous deposit upon their surfaces, and the resultant formation of rhinoliths.

The earliest case on record was that reported by Mathias de Gardi,[1] giving an account of the removal of a rhinal calculus as large as a fir cone. During the next two hundred years only three or four cases were chronicled. In 1727, Wepfer[2] gave the curious history of one in which the calculus was completely buried and covered by mucous membrane. From this time forward cases were more frequently recorded, and by 1889 some forty others were added to the list. Since then twenty others have been gathered from the various medical journals of Europe and America, one of the most recent that I have seen being that of Wagner,[3] of Halle. In his case, which occurred in a child 13 years of age, a cubical hole was left in the lateral side of the nose, produced by the impression of the stone upon the upper jaw.

The formation of rhinoliths is controlled in a large measure by the same laws as those directing the production of calculi in the other mucous tracts of the body. Let a foreign body be permanently retained within the nasal cavity, and the probability is that it will become a nucleus for the deposition of the earthy constituents of the normal fluids secreted by the nose; and so long as it is retained will gradually increase in

(1) "Pratica Venise," 1502, post II., cap. xiv, p. 308.
(2) "Ephem.," 1727, obs. 192, p. 905.
(3) "Journal of Laryngology," Feb., 1892, p. 73.

size as well as density. In most of the cases recorded a nucleus was discovered; and even when the nucleus was absent, a hollow in the centre of the stone would indicate its presence in former years, prior to the period of its absorption—as in Bosworth's[4] case, which on section after removal revealed a cavity in its centre corresponding in shape and size to a kidney bean, the presence of which had no doubt led to the formation of the calculus.

The character of these inserted nuclei differ in many cases very widely from each other. In Ruysch's[5] case the nucleus was a piece of amber; in Baber's[6] case, a rag; in Seifert's,[7] a button; in one of Chiari's[8] cases, the nucleus was a piece of cork, in the other a piece of bone; in Wright's,[9] a sponge; in Major's,[10] a sea shell; in Ball's,[11] a pea; while quite a number have been reported in which the nucleus had been a cherry stone.

I believe there is only one case on record of the rhinoliths being multiple, that of Axmann[12]; and there is only one likewise of their being bilateral, the case of Nitsche,[13] the nucleus in each case proving to be a cherry stone.

A chemical analysis of rhinoliths proves them to consist largely of the ordinary saline ingredients of nasal mucus, which, according to Robin, consists of:

Chlorides of sod. and pot., 5.60,
Phosphates of lime and mag., 3.50,
Sulph. and carb. of sod., .90 to 1000 parts.

Schech states that rhinoliths consist of 80 per cent. of these salines, combined with a fraction of iron and 20 per cent. of organic matter.

The symptoms are largely those that we might expect from the presence of a foreign body, their precise character being dependent upon the form, size, and position occupied. The soft parts, cartilages, and bones are often crowded out of place, the deformity being frequently accompanied by ulceration and profuse offensive discharge.

(4) "Diseases of Nose and Throat," by Bosworth, 1889, p. 327.
(5) "Observ. Anat.," Amsterdam, 1733, obs. 44, p. 42.
(6) "London Lancet," Ap., 1887, p. 772.
(7) Ibid., p. 86.
(8) "Annales des Mal. du Larynx," etc., Jan., 1890.
(9) "Medical Record," Oct. 12, 1889.
(10) "Journal of Laryngology," Sept., 1890, p. 384.
(11) "British Med. Journal," March 1, 1890.
(12) "American Jour. Med. Sciences," 1869, vol. 5, p. 204.
(13) "Monats. fur Ohrenheilk," July, 1891.

In Hendley's[14] case the nose was greatly swollen, while a sinus opened externally discharging pus. In Bovill's,[15] there was ptosis, epiphora, and partial paralysis of left side of face. In Nolte's,[16] the hard palate was perforated. In Bettman's[17] and Clark's cases, mucous polypi were developed.

The formation of nasal calculus is usually exceedingly slow, commencing almost invariably in childhood, adult life often being reached before the stone is discovered and removed. When no anterior deformity exists, hiding and closing over the calculus, diagnosis should not be difficult, as touching with the probe would produce the characteristic grating, quite different from that of necrosed bone. The fetor of the latter is likewise more horrible.

Of course, the only treatment for rhinolith is removal; and as it is frequently too large to admit of passage through the nostril, crushing has to be resorted to. This can usually be accomplished by a strong duck-bill nasal forceps, or a small lithotrite, but is often a by no means easy operation, and will require a general anæsthetic, or, what is probably better, complete local anæsthesia by cocaine. In Mackenzie's[18] case extensive hemorrhage resulted after the crushing, followed by facial cellulitis. In Hendley's, the calculus was removed after splitting up the external nose; and Nolte's was extracted through the pharynx, after cutting through the soft palate.

Although such a large number have been reported during recent years, still they are usually a list of isolated cases, more than one from the records of one individual not frequently occurring. Each instance, however, when analyzed, has special features of its own; and on that ground the following cases may not be uninteresting:

Case 1. On Dec. 23, 1891, Miss R.,* æt. 19, was referred to me by Dr. Nichol, of Cookstown, for the removal of deflected septum, the right nasal passage being completely occluded by the deformity. On examination, the central part of the right ala was very protuber-

(14) "British Med. Jour.," Dec., 1886, p. 1161.
(15) "British Med. Jour.," Oct. 16, 1886, p. 718.
(16) "Allq. Med. Cent. Zeit.," 1887, p. 1180.
(17) "Jour. Amer. Med. Assoc.," Sept. 6, 1884.
(18) "Op. Cit.," p. 438.
*Reported to Toronto Med. Soc., Jan., 1892.

ant, giving a full, puffy appearance to that side of the nose. The anterior part of the triangular cartilage was thickened and deviated to the right, pressing against the right lateral wall and inferior turbinated, and apparently giving rise by pressure to the alar deformity. The interior of the right naris could not be examined on account of the cartilaginous obstruction; but on the left side, the forward concavity of the septum was compensated for by a very large convexity further backwards.

After removing the deflected septum by Bosworth's method, I discovered behind it a foreign body of some kind, partially covered by mucous membrane. When I could examine it more thoroughly, it proved to be a nasal calculus, ¾ inch by ⅝ by ⅜. After applying freely a 20 per cent. sol. of cocaine, I attempted to remove it by forceps. Various fragments broke away, but the large centre piece, in spite of a good deal of traction, could not be made to pass through the anterior portion of the bony cavity. Finally, I succeeded in splitting it into two lateral halves by means of a strong duck-bill forceps, the blades being placed above and below the rhinolith, the extraction being accomplished at the same time, both fragments being withdrawn by the one effort. On examination, each half presented a hollow semi-globular facet about the size of a split pea.

By a continuation of treatment the septal cartilage operated upon healed, breathing became normal, and the offensive catarrhal discharge disappeared. As might be expected, the nose assumed a more natural shape.

On enquiry, the patient acknowledged having put something into her nose when she was about seven years of age. She thought at the time that she had got it out again, and said nothing about it. It was two or three years subsequent to this that the nose commenced to fill in.

There is no doubt that the pea was the cause of the difficulty; and having remained in the nostril for twelve years had resulted in the formation of the rhinolith.

To account for the complete anterior deviation of the nasal septum to the right is somewhat difficult, except on the principle of compensation. As the ossification of the vomer is not complete until after puberty, it would yield readily to the pressure of the enlarging foreign body, the result being the posterior deviation to the left. The anterior septal cartilage, however, being free, would naturally yield to the respiratory pressure, and this being confined almost exclusively to the left nostril would gradually force over the triangular cartilage to the right, producing the characteristic deformity.

Case 2. July 4, 1892, Mrs. N., æt 28, music teacher, presented herself for treatment. Had been troubled with excessive discharge from left nostril for many years. Six years previously she had consulted a licensed quack, and was under his care for three years continuously without receiving any benefit. Subsequent to this she obtained some relief by syringing the nostril daily with salt and water.

On examination, there was no apparent deformity. Even after shrinkage produced by cocaine the floor of the left nasal fossa could not be seen, either by anterior or posterior rhinoscopy. On introducing a curved cotton-holder, however, a dense gritty substance was found to cover the floor of the whole inferior meatus, and with ordinary force was immovable.

After applying a stronger solution of cocaine, I broke off several fragments. These proved the foreign body to be a rhinolith, and at two other sittings, with crocodile forceps, I broke it into fragments. Some of these were extracted through the anterior naris, and others pushed through the posterior choana. Two pieces were unavoidably swallowed, and owing to their size and angular character produced a sensation of choking until washed down by water. The dimensions of the two largest fragments, still in my possession, are respectively $\frac{7}{8} \times \frac{1}{2} \times \frac{3}{16}$ and $\frac{5}{8} \times \frac{1}{2} \times \frac{1}{8}$ of an inch. The whole calculus must have been at least 2 inches in length, and varying in width from ⅜ to ⅝ of an inch, according to the capacity of the various portions of the meatus, while nowhere could it have been more than ¼ inch in thickness.

Notwithstanding the application of a 20 per cent. solution of cocaine, the fracturing produced considerable pain, and, as might be expected, was attended by a good deal of local hemorrhage. There was no resultant inflammatory action, however; and the patient made an excellent recovery, with complete cessation of catarrhal symptoms; while the unpleasant odor of breath from which she had suffered for

years, and which always attends such cases, was entirely removed.

On comparing the two sides, after removal of the rhinolith, I noticed that there was a decided difference in the plane of the floor of the two nasal fossæ. Although the mucous membrane of the affected side had not been broken, yet the constant pressure, which must have been present for fifteen years or more, had retarded the growth of the palate process of the maxillary bone, reducing it to little more than a shell, and making the floor of the meatus almost a quarter of an inch lower than its fellow of the opposite side.

The unusual shape of the rhinolith rendered its etiology obscure. The patient denied ever having put anything into her nose; but she remembered, when a child, receiving a severe blow from a hard substance on the left side of the face and nose, from the effects of which she suffered for a long time. Query: Could there be any connection between a fractured palatal process and the rhinolith?

POST-NASAL ADENOIDS.*

BY J. D. THORBURN, M.B., L.R.C.P. AND S. EDIN.,
Late Superintendent of Hospital for Consumption and Diseases of the Throat, Manchester, England.

Mr. President and Gentlemen:

So much has been written upon post-nasal adenoid vegetations that it was with some feeling of diffidence I selected this subject for my paper; but it is one of such importance, especially to us Canadians, that I deemed it worthy to be brought before the association. Post-nasal adenoids were known to Hunter, but were first described by Wilhelm Meyer, Copenhagen, who gave a description of the etiology, structure, and the symptoms arising from their presence. Since that time many writers of greater or less worth have contributed much upon the same subject.

"Adenoid vegetations consist of a collection of hypertrophied lymphoid structures, found, as a rule, in young children and infants, more rarely in adults, congenital in some, developed in infancy in others, and showing a tendency to disappear at puberty." The etiology of these true hypertrophic changes in the lymphatic glands is not well understood.

*Read before the Ontario Medical Association, June 2nd, 1892.

From a study of cases, we are forced to admit that scrofula, tuberculosis, syphilis, rheumatism, and the various exanthemata, are all predisposing causes. Many authorities deny, however, that the above-mentioned dyscrasia influence the formation of the growths, and explain their presence as being due to inflammatory changes, resulting in a tendency to hypertrophy of the glandular and surrounding tissues lining the post-nasal space.

"When, from any cause, we have partial occlusion of the nasal fossæ, so long as respiration is conducted through the nose, there is, of a physical necessity, a diminution in the barometric pressure behind the seat of stenosis. This inevitably results in more or less over-filling of the blood vessels, which in its turn leads to hypernutrition."

The inflammatory changes of this region being increased by primary catarrhal changes, characterized by repeated attacks of acute rhinitis, hypertrophy of pre-existing elements is nowhere more conspicuously seen than in the case of post-nasal adenoids.

The *modus operandi* of the diminished barometric pressure behind the stenosis is as follows: As you know, when air passes behind an obstruction into a cavity, it becomes rarefied; this rarefaction of air has a suction power, which is influenced by each respiratory act in such a manner as to cause a drawing upon, and then a more or less relaxation, of the tissues.

The bony structures cannot be influenced in a direct manner; therefore the soft parts are subjected to a greater suction-pump action in order to compensate for the inability of the hard framework. In time, the blood vessels running through the yielding tissues become permanently dilated, and the increased blood supply leads in turn to hypernutrition and true hypertrophy.

The most common causes of the stenosis are (*a*) congenital osseous malformations; (*b*) small nostrils; (*c*) deflected septa; (*d*) septal spurs; (*e*) hypertrophic rhinitis; (*f*) simple engorgement of the tissue covering more especially the inferior turbinated bones; (*h*) thickened septa; (*i*) then, again, adenoids are found associated with atrophic rhinitis and cleft palate.

Bosworth says, "As a rule, the seat of obstruction is situated near the anterior part of the nasal fossæ, and that in the case of deflected

septa we often find the V-shaped contraction of the superior maxilla." After the above explanation, one can appreciate why the vault of the pharynx is the seat of adenoid vegetation, accepting the barometric theory as being the true one in the great majority of cases; still there are other causes to account for the presence of adenoids which shall be mentioned later on.

Not being satisfied with the various classifications of adenoids as given by different authors, I have attempted a classification for myself, based upon clinical experience, and have found it of some service, both as regards diagnosis and treatment, and hope it will prove of value to others.

First, those resulting from nasal stenosis, which I again subdivide into (1) soft, (2) firm, (3) mixed.

(1) The soft variety occurs in young children, subjects of a slight nasal stenosis. The dimensions of the growth and shape vary from day to day, at one time being small and flat, at another large, and sending down finger-like prolongations; these changes are, no doubt, owing to transitory œdema of the tissues.

Associated with these changes in size and shape, we find a corresponding increasing and decreasing nasal stenosis. From the appearance, structure, and behavior of the growths, one would almost be justified in calling them a polypoid form of the disease. It is this variety that gives rise to the repeated attacks of acute rhinitis and otorrhœa in young children.

(2) Firm. These obtain in a totally different type of patient, in contradistinction to class 1. They are found in healthy, robust subjects, are slow in growth, firm in consistence, more regular in outline, showing a tendency to lateral and downward extension; do not vary in size from day to day. There is a marked nasal obstruction, and as a rule greatly enlarged tonsils. The best defined symptoms indicating their presence is facial deformity, noisy breathing and snoring, and if far advanced we find well-marked pigeon breast.

(3) Mixed. Fill in the gap between 1 and 2, both as regards structure and symptoms.

Besides the above classes, I wish to draw your attention to at least two other varieties which have certain peculiarities of their own, not so much in structure as in etiology and symptoms. We find in a certain number of young adults well-marked adenoids of large size, localized in the vault of the pharynx, firm in consistence. Upon post-rhinoscopic examination, the growth, instead of presenting a grayish appearance, presents rather that of a bluish-red, the same as seen in passive inflammation of mucous tissue. Associated with this form are enlarged tonsils, showing on their surface indications of former inflammatory attacks. Now it has been proven beyond doubt by Lennox Browne and others that these attacks are due to rheumatism. This being the case with the buccal tonsils, it must of necessity be the same with the pharyngeal tonsil, which is similar in structure and functions.

The following history will go to prove my statement: H.J., æt. 15, schoolboy; healthy, but has a history of growing pains (rheumatism), and slight rheumatic attacks; father and mother both subject to rheumatism. Previous history: Except for above attacks and also a tendency to "ulcerated throat," he has enjoyed the best of health. Did not snore as a child, but does now. Present attack began with a severe cold, complained of rheumatic pains throughout the body; these lasted three days, when the throat became involved in a right-sided tonsillitis, followed by the same condition on the left side. Leaving there, the pharyngeal (Luschska) tonsil was attacked; this, jumping from place to place, lasted three weeks. After a tedious convalescence the patient recovered, but now has a permanently enlarged pharyngeal tonsil. This is one of many cases that have come under my notice.

The fifth and last variety is that of the chronically enlarged pharyngeal tonsil, the outcome of repeated attacks of inflammation caused by the presence of the vegetable parasite, leptothrix buccalis, and occurring chiefly in young adults, This parasite shows its presence in the form of small white or yellowish spots the size of millet seeds, covering a cheesy mass, which when pressed and squeezed between the fingers emits a very offensive odor. These masses are to be seen studded over all the nostrils and even on the base of the tongue. The patient is made aware of their presence from their taste, which is quite as bad as their odor.

These masses cause localized inflammation in the substance of the affected part, and in time

a true hypertrophy of the same. The symptoms arising from their presence are more of those of a post-pharyngeal catarrh than of obstruction. The patient also hawks up from time to time some of the cheesy masses. Race or climate has but little influence over the growth of adenoids. The only exception in this rule is the Hebrew race, who are prone to adenoid formation. Before describing the general symptoms of adenoids, it would be well to refer to the functions of nasal respiration.

(1) Air passing through the nostrils is brought to the temperature of the body. (2) It is moistened and filtered. (3) Gaseous exchange takes place. Any interference of these functions would tend to lead to bronchitis, croup, asthma, and other diseases of the respiratory tract.

Symptoms: In the infant the inability to feed, when not due to "tongue-tie," is generally due to the presence of adenoids. In older children we have the well-marked adenoid expression of countenance due to linea labialis, extending downwards from the angle of the mouth until it becomes lost in the lower portion of the face. An open mouth, stupid expression, pinched nostrils, go to make up the picture. Snoring when asleep is a very prominent and distressing symptom; when there is no actual snoring, the patient sleeping with his mouth open has his rest disturbed, and in the morning his lips are dry and parched. Inability to pronounce various letters, as the explosive labial, is another almost pathognomonic sign, as poat for boat.

Attacks of deafness are common; these may be due to a simple or a purulent catarrh of the middle ear or to an indrawing of the drum-head. The sense of smell and taste are impaired, headache is complained of, as well as blood escaping from the back of the mouth. Time will not permit me to enumerate the many other symptoms caused by these growths.

Examination of the mouth and throat shows almost certain indications of the presence of adenoids; higher up in the vault inspection we see enlarged buccal tonsils, and on the back of the pharynx œdematous solitary glands standing out from the surrounding tissue. The next thing we notice is the remarkably small space between the soft palate and post pharynx. If possible, the next step in verifying the diagnosis is examination by means of the post-rhinoscopic mirror, a difficult procedure when adenoids are present. If unable to see them, pass a guarded finger up behind the soft palate and ascertain by feeling their absence or presence. Upon the withdrawal of the finger, it is frequently found covered with a bloody mucus.

Treatment: I will not say anything about the medical treatment as applied to the removal of the growths, inasmuch as I do not consider it worthy of attention. Surgical interference affords us the only means of getting rid of the disease. In children, when the growths are soft, my mode of treatment consists in scraping away the tissue with the finger nail, no anæsthetic being required. In growths of firmer consistency one of the various forms of sharp spoons, forceps, or curettes are to be recommended, according to the locality of the growths and the temperament of the patient.

In my practice chloroform or ether are never used unless absolutely necessary, and that occurs in very few cases; cocaine has no anæsthetic effect upon the diseased tissue. The after-treatmeet consists in insufflating boric acid through either nostril. I never use a nasal wash until some days after the operation, owing to the tendency of washing into the Eustachian tube some of the *débris*. Place the patient in bed, and do not allow him to take of either too hot or too cold food. After the wound is healed, remove the obstruction or exciting cause.

Selections.

ABSTRACT OF A PAPER ON EXCISION OF THE BREAST FOR CANCER.*

BY W. WATSON CHEYNE, M.B. ED., F.R.C.S. ENG.,
Professor of Surgery at King's College; Surgeon to King's College Hospital, etc.

The view which I think is generally held is that the carcinoma begins as an overgrowth of epithelium in the acini or ducts of the breast, and that it spreads partly by epithelial projections from these acini or ducts pushing their way into the surrounding tissues and partly by fresh infection of neighboring ducts or acini; and, further, that the same overgrowth of gland epithelium which produced the original disease

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is liable to occur in other parts of the breast, giving rise to multiple breast tumors, and that it is to this fresh overgrowth that local recurrences are most commonly due where portions of breast tissue are left behind. The latter part of the view is, I believe, incorrect. No doubt the earliest commencement of a cancer must be in connection with the gland epithelium, but I believe that once the disease has commenced the epithelial overgrowth soon pushes its way through the wall of the duct or acinus and passes then into the lymph channels and vessels surrounding it, and that having arrived there the subsequent growth of the tumor occurs entirely by multiplication of the original epithelial cells and their derivatives along these lymph channels. The cancerous tumor is, in fact, a growth in lymphatic canals, and the areolar spaces are in the main dilated lymph vessels and spaces. Hence the cancer cells are in direct communication with the lymph stream from a very early period of the tumor formation, and are constantly liable to be carried away with the fluid lymph; and may either stick further on, giving rise to secondary nodules in the breast or surrounding fat and fascia, or may be carried to the nearest lymphatic glands causing infection and tumor formation there. The neighboring acini around a tumor do not form fresh growth; but, as can be frequently seen in microscopical specimens, they are simply pushed aside, undergo atrophy, and disappear. It can be readily seen in recurrences in connection with remnants of breast tissue left behind that although the glandular epithelium shows irritative changes, the cancerous growth has begun in the lymphatic vessels around; and Mr. Stiles has in a number of instances found plugs of cancer cells in lymphatic vessels in apparently healthy breast tissue far away from the primary tumor. Hence the main point to be considered in connection with the spread of a cancerous growth in an organ is the disposition of the lymphatic vessels in that organ and the paths along which the lymph leaves it.

According to M. Sappey, the mamma is supplied with extremely numerous lymphatics. They commence in connection with the acini in the form of a plexus around them; they then collect on the surface of the lobule, completely enveloping it in a close plexus, and the plexuses of neighboring lobules communicate. From the lobules they run along the ducts, still in a plexiform arrangement around them, and so they pass from all parts of the breast towards the nipple. Under the areola the vessels, now of considerable size, form a plexus, called by M. Sappey the sub-areolar plexus, which is also joined by the vessels from the skin of the areola and its neighborhood. From this sub-areolar plexus the lymph is carried towards the axillary lymphatic glands by larger vessels, of which he describes four, two from the centre and one from the upper and lower part of this sub-areolar plexus respectively. According to M. Sappey, the whole of the mammary lymph follows the above-mentioned course, but subsequent observers have stated that there is also a plentiful return from the under surface of the gland through the pectoral fascia, and this corresponds with the pathological facts, which leave no doubt on that matter. It follows, however, from Sappey's investigations that at whatever part of the breast a cancerous tumor is formed, though some of the infective material will be carried directly in the pectoral fascia and fat to the axilla, part may also pass through the gland itself towards the nipple. Even where the tumor is at the extreme axillary end of the breast—under which circumstances some surgeons advise removal of the tumor alone, although there may be direct flow towards the axilla—there is also a flow backwards through the mamma towards the nipple, and infective material may thus very readily be left behind if the tumor alone is removed. Hence, I believe that in the case of the breast it is absolutely necessary to remove the whole organ wherever the tumor be situated, because it is quite impossible to say what parts are free from the disease and what are not, and I see no reason for running any risk of recurrence by leaving portions of the breast behind. It is, however, easier to speak of complete removal of the breast than to do it, for it turns out that the breast is a much more diffuse and extensive organ than has been supposed. This has been demonstrated by Mr. Stiles by a very simple method, which I must refer to, as it is one of great practical value in determining during the course of an operation not only whether the whole breast, but also whether the whole disease

has been removed. Mr. Stiles found that when a cut surface on which masses of cells—*e.g.*, epithelial masses—were present was first washed free from blood, then immersed for five minutes in a five per cent. solution of nitric acid, and then washed under the tap for five minutes, the epithelium was readily differentiated from the other tissues by the naked eye, presenting the appearance of dull white spots or masses, while the fat became yellow and the fibrous tissues welled up and became semi-transparent. By treating the breast in this way after removal, it is easy to determine whether lobules of the breast or nodules of cancer have been cut through. In practice, as soon as the breast is removed, it is handed over to an assistant, who puts it through the above process while the operator is going on with the dissection of the axilla. By the time the axilla has been thoroughly cleaned out the breast is ready for inspection, and can be carefully examined before closing the wound, and if any portion of breast tissue or of disease is detected the remaining part is at once sought for and freely removed. I have always used this plan since Mr. Stiles told me of it; and in one very advanced case I found by means of it that I had cut through a nodule of disease in the fat at the outer border of the axilla which I would certainly have overlooked otherwise, and on searching I found the rest of the nodule and removed it. Mr. Stiles' nitric acid method is also applicable to tumors elsewhere; and in one case, where I was removing an epithelioma on the inner side of the cheek, and involving the lower jaw, I detected by means of it a narrow strand of disease running backwards beneath the ramus of the jaw, which I had not observed on dissecting away the growth. I consider this method a very valuable addition to our operative means, the only objection to it being, I think, the length of time that it takes. In the case of the breast, it is necessary to cut off the breast from the axillary fat before clearing out the contents of the axilla in order to have it tested, whereas I find I can get the axillary fat and glands away much more readily by leaving the breast attached, the weight of the mamma hanging over the side pulling down the axillary contents more easily than can be done by the hand. This is, however, a minor objection, and Mr. Stiles may perhaps be able to meet it.

To return now to the extent of the breast, it is found to reach laterally in all directions, especially upwards and towards the axilla, much further than has been supposed, and it is impossible to remove it completely by the small elliptical incision figured in the older text-books. In order to take away the breast completely, it is necessary that the incisions should extend well beyond it at each end, and that a large amount of skin, I believe an amount co-extensive at any rate with the bulging portion of the breast, should be removed. For another reason it is necessary that large portions of skin should be included between the incisions, viz., in order to ensure the removal of the sub-areolar lymphatic plexus and the vessels proceeding from it towards the axilla, and also to take away as far as possible the bands of fibrous tissue which pass from the breast to the skin, the suspensory ligaments of the mamma, which have been found very frequently to contain breast tissue, as well as lymphatic vessels coming from the breast, and which are therefore a source of risk. Further, the skin over the tumor wherever situated should be widely removed, even although it is not actually involved in the disease and that for the same reason, viz., that the bands of fascia running from the neighborhood of the tumor to the skin are very likely indeed to be infected with the disease. Where the skin has itself become involved in the disease —to however small an extent—it must be very freely removed; I should say, some three or four inches clear on each side of the nodule, for the lymphatic plexuses in the skin are very numerous, especially at the deeper part, where the vessels are largest. Hence, as regards the skin incisions, no absolute rule can be laid down; they must be planned so as to ensure complete removal of the breast and to get wide of the disease, and must usually be irregular in shape. As I said before, they should include practically all the prominent part of the breast, and when the growth is above or below the centre of the breast further incisions must be made at right angles, so as to include it. As a rule, even where the removal of the skin has been very extensive, I have generally succeeded in bringing the edges together, and thus getting union by first intention by undermining the skin widely and by using button stitches and

relaxation sutures of silver wire. Where, however, the skin cannot be brought together at all, or where the patient is very spare and the traction is likely to lead to sloughing, the wound can be readily closed by Professor Thiersch's method of skin-grafting, as described by me in *The Lancet* last summer, the grafts being either applied at the time, or, if the patient is at all collapsed, after an interval of about ten days.

Although Mr. Sappey was of opinion that the whole of the mammary lymphatics ran forwards and joined the sub-areolar plexus, it seems clear from the researches of Mr. Langhans, Dr. Heidenhain, Mr. Stiles, and others, and also from clinical experience, that many lymphatics must leave the breast on the under surface and run in the pectoral fascia, generally along with blood vessels, towards the axillary glands; some, however, I believe, also go towards the anterior ends of the intercostal spaces, where they pass into the thorax and join the anterior mediastinal glands, communicating also, I think, with lymphatics about the sternum. Hence it is essential to remove the pectoral fascia thoroughly co-extensive with the mamma and right on to the sternum. Besides the presence of lymphatics, Dr. Heidenhain and Mr. Stiles have found that many lobules of the breast are intimately connected with the pectoral fascia, and would certainly be left behind if the breast is simply torn off as is sometimes done. Indeed, so intimately is the pectoral fascia connected, on the one hand, with the breast, and, on the other, with the pectoral muscle, that Dr. Heidenhain states that it is necessary in all cases not merely to try to dissect the fascia off from the muscle, but also to remove a thin layer of the surface of the pectoral muscle. This is certainly necessary under the tumor and under the central mass of the breast; I doubt if it is so necessary under the peripheral parts of the breast. Dr. Heidenhain found that where the skin was freely removed, the recurrences practically always took a place in connection with the pectoral fascia.

If the tumor has become adherent to the pectoral muscle, the free removal of the affected part is of course indicated, but we must bear in mind that the majority of the lymphatics in muscle run parallel with the muscular fibres, and hence the mere cutting a circular piece out of the muscle will not suffice; the whole strip of affected muscle must be removed. Dr. Heidenhain points out that the muscular contractions tend to force on any infective material along the lymphatics, and he holds that once a muscle is attacked, even at one place only, the whole muscle should be looked on as diseased, and should therefore be removed. I doubt, however, whether with a small involvement of the pectoralis major it is necessary to remove the whole muscle. I should in such a case only remove a quantity of muscular tissue on each side, being careful, however, to take the whole length of the fibres as far as possible. The spread of cancer in muscle is a matter of great importance in cases of the malady affecting muscles elsewhere, especially in a case of the tongue, where, as we know, recurrence is extremely apt to occur, mainly, I think, because the whole of the muscles affected is not removed.

In the axillary space the main lymphatics run in the fat towards the glands, but some also, I think, run in the fascia over the serratus magnus, and some upwards between the pectoralis major and minor to enter the axillary space above the latter muscle. It is well, I believe, always to remove the fascia over the serratus as far back as the latissimus dorsi, where I have more than once found nodules of cancer, and also to remove the layer of fat and fascia which one finds between the pectoralis major and minor towards the outer part, where also I have found disease. Lastly, it is imperative in all cases to remove all fat and glands from the axilla whether there is any noticeable disease or not, for the glands are usually very early affected, and the mere absence of hardness does not necessarily imply absence of disease. Further, it is not sufficient simply to pull out the glands which are felt to be enlarged; the fat and glands must be removed completely by careful dissection, and that for three reasons. In the first place, as I have mentioned, in the early stage the infected glands are not noticeable, and the removal only of enlarged glands does not necessarily mean removal of all the disease; in the second place, if only the glands are taken away, the lymphatic vessels are left in the fat, and these are often found plugged with cancer cells some distance from the glands; and, thirdly,

it is advisable to remove all the fat, because Mr. Stiles has shown that fresh formation of lymphatic tissue frequently occurs around certain fat lobules under the irritation from the breast disease, and these new lymphatic glands may subsequently become the seat of disease. These fat lobules are, according to Mr. Stiles, lymphatic glands which have undergone fatty involution and again become lymphoid in consequence of changes in the mamma set up by the presence of the tumor.

To sum up: In all cases there should be a free removal of the skin, especially over the tumor, very free indeed if the skin is actually the seat of disease; complete removal of the breast, bearing in mind its great extent; removal of the pectorial fascia co-extensive with the breast and right on to the sternum, along with a thin layer of the muscle behind the tumor and the main part of the breast; removal of the fascia over the serratus magnus in the axillary region and of all glands and fat from the axilla, not by pulling out the glands, but by clean dissection; further, if the tumor is adherent to the pectoral muscle, removal of large strips of that muscle. This may seem a very extensive operation where the tumor is small, but the object of the operation is not to remove the tumor, but to rid the patient of her disease, and that can only be done by removing, as far as possible, all the probable seats of recurrence. The operation is fortunately one in which, if performed aseptically, the question of mortality does not come into play, and the results of this very free removal seem to me to promise well. Although I have been brought up to deal more freely with these cases than used to be the fashion, my impression is that there has been an improvement as regards recurrences since I began to act closely in accordance with these recent pathological researches. During the last two years I have operated in this free manner in over twenty cases, and, so far as I am aware—and I know about the majority of the cases—recurrence has only as yet taken place in three instances, in one case being intra-thoracic, and in another—the second of the cases of skin grafting which I published in *The Lancet* of last year—in the form of a small nodule in the skin over the angle of the scapula, three inches and a quarter away from the edge of my former incision in the skin—a striking instance of the necessity of free removal of the skin once it has become involved in the disease.—*Lancet.*

COLONIZATION FOR EPILEPTICS.—Epileptics, a class of people cut off from ordinary social pleasures and pursuits by a disease which robs them actually, in most cases, of their faculties only for a few minutes each day or week or month, have been peculiarly unfortunate in their relations to their fellows in every community in which they are found. If a family of intelligent workers are selected, containing one epileptic, it will be found that as a wage-earner, and as a factor in the little world in which he lives, the epileptic ranks far below his family, usually for the reason that he is an epileptic, and not because he is inferior in ability. Undoubtedly such illustrations can be multiplied indefinitely. Dr. J. Madison Taylor, in an address before the Neurological Society some time ago, which was published in this magazine, pleaded eloquently for a more extended opening of occupations to this class of people. This subject has again been brought to the attention of the medical profession by an address made before the State Board of Charities, at Albany, by Dr. Frederick Peterson, in which he outlined a plan for an epileptic colony. Although this idea is by no means a new one, yet Dr. Peterson demonstrates in detail what such a colony system should be. As the State of New York has passed the law appointing a commission, not only to select a site and to prepare plans for an epileptic institution, but also to prepare these plans on a colony system, the matter assumes immediate practical importance. In the first place, Dr. Peterson believes that all ideas of an "institution" must be lost sight of; on the other hand, it should be rather of the appearance of a small village, in which there should be no very large buildings, nor should there be a symmetrical arrangement of cottages, workshops, etc., as was done at Gallipolis, Ohio. The buildings should be arranged so that they would be entirely separated, provided with their own little gardens, surrounded by hedges, and made as independent and homelike as possible. As to the practical aims of the colony, there should be a school, an industrial college, and a hospital. The colony should be situated in the

centre of population, so as to be easy of access to patients and their friends, and also for a more important reason, *i.e.*, to secure the services of a visiting board of specialists in nervous and mental diseases. Dr. Peterson outlines in detail the arrangement of the various occupations which could be taught to advantage, but suggests that it should grow by a sort of evolution, its wants being supplied as they became manifest. All patients under age could be sent by their parents in just the same manner as they would children to boarding-school. All the patients should be voluntary inhabitants of the colony, excepting those who from mental impairment would require confinement in a hospital; with these ordinary procedures taken in lunacy cases could be carried out, committing them formally to the infirmary of the colony. The evolution of this colony, as outlined by Dr. Peterson, by the New York Commission, will be watched with great interest. Its success will mark a great era in the combination of medical and economic elements.—*University Medical Magazine.*

PUERPERAL TETANUS AFTER ABORTION.—Vinay (*Brit. Med. Jour.*, April 9, 1892) reports a case of this rare complication which occurred last autumn in the practice of a medical man in Paris. The patient was a IV. para, æt. 36. On November 10, 1891, when in the second month of pregnancy, uterine hemorrhages set in, and abortion took place unobserved in the course of these attacks. No tampon was applied. The lochia became fœtid, there was hypogastric pain, and it was deemed necessary to use the curette. The operation was done on Nov. 17th under chloroform. Some putrid membrane was removed, and the endometrium was scraped and carefully washed. One hour later a rigor occurred. On the night of Nov. 19th a stiffness began to be felt in the region of the masseters, then trismus, rapidly followed by pharyngeal spasm. In the course of the 20th, the most pronounced tetanus developed. During the attacks emprosthotonos, instead of opisthotonos, occurred, the head and trunk being violently bent forwards. On the morning of the 21st, the attacks were very frequent and severe, and the patient died thirty-six hours after the appearance of the first symptoms. She was conscious throughout; the pulse did not exceed 108, nor the vaginal temperature 99.8°. Vinay has collected 106 cases of puerperal tetanus. The recoveries amounted only to 12; 59 occurred in labors at term, 7 recovering; and 47 in abortions, 5 recovering. Hence the total mortality is 88.67 per cent., or higher than in any form of surgical tetanus, excepting in cases of wounds on the battlefield, where the mortality is as follows: In tetanus after wounds of the head and neck, 95.2 per cent.; after wounds of the lower extremity, 89.7 per cent.; after wounds of upper extremity, 86.3 per cent. Relapses after one attack of puerperal tetanus have always proved fatal, hence the necessity of prolonged rest in bed when the patient has recovered from tetanus. The disease is as deadly when it sets in late as when it occurs within a day or two of labor. The only treatment which has afforded distinctly good results is inhalation of chloroform carefully maintained for several hours, or large doses of chloral (fifteen grains) hourly, with narcotization when the attacks of spasm set in. Localized tetanus of the uterus is a disease completely distinct from puerperal tetanus.—*Brooklyn Med. Jour.*

THE TREATMENT OF ANGINA PECTORIS.—Angina pectoris and arterial sclerosis are two very common diseases in Russia. This statistical connection is scarcely surprising when it is considered that the former affection is probably due to sclerosis of the coronary arteries of the heart. The severe and prolonged paroxysms of angina pectoris may be explained by the presence of a thrombus or embolus in these arteries. Dr. Kernig, who gave a lecture on the treatment of anginis pectoris before the Medical Association of St. Petersburg, which was published by the St. Petersburg *Medicinische Wochenschrift*, speaks of two cases in which the *post mortem* examination confirmed the above-mentioned opinion of the etiology of the affection. In both cases sudden death had followed a severe paroxysm, and well-defined softening of the cardiac muscle, with incipient demarcation of the focus of disease, was present. This view of the causation of the paroxysm is supported by a clinical observation which Dr. Kernig made, namely, that in some cases, in a

few days after the paroxysm, pericarditic symptoms were observed, which might be understood as proving that the centre of softening had reached the pericardium. Consistently with this belief, he enjoins absolute rest for about two weeks after an attack, so as to favor the cicatrization of the softening centre in the cardiac muscle. This absolute rest must be maintained even when the patient feels quite well after the paroxysm and has a good pulse. He is, nevertheless, always in great danger immediately after the attack; but with complete rest and prudent avoidance of all unnecessary exertion of the heart he may escape this danger, which will be passed when the softened cardiac muscle has cicatrized. Dr. Kernig treated several extremely grave cases according to this rule without a single relapse, though one of the patients had remained for four years under observation. Patients must be particularly careful at such times, when from previous experience a paroxysm may be expected. Walking in heavy clothes must be absolutely avoided. With the first symptom of an approaching attack the sufferer must rest immediately, and if possible assume the recumbent position. When the attack occurs in the street the patient must immediately be removed to his home, and should certainly not attempt to continue walking. At the same time, Dr. Kernig does not fail to appreciate the value of regular and rational exercise when no fresh attack is imminent and sufficient rest has been taken after the last paroxysm.—*Lancet.*

BOILED MILK AS AN ALIMENT ABROAD.—The practice of subjecting milk to boiling heat before consumption has of late been widely adopted in European countries, whose public hygiene has hitherto been such as to counsel every means of minimizing the conveyance of infection. British travellers, in Latin countries especially, will be reassured by this salutary innovation, experience having taught them that the milk supplied in hotels and pensions and added to their morning meal of tea or coffee has too often been tainted with the micro-organisms of infectious or contagious disease, chiefly from being diluted with impure water, or, not seldom, from containing the desquamatory débris of convalescents from scarlet fever. Sanitary truth progresses slowly in those regions, and when the public health officer at length succeeded in establishing the unwelcome fact that milk was one of the surest channels by which infectious diseases were diffused, he had to encounter the objection that the boiling process to which he insisted on its being subjected deprives it of its nutrient properties and also its digestibility. Again, however, he has been able to show that reason was on his side and that milk after boiling is not only more easily digested, but has actually a higher nutrient value than in the crude state. We allude especially to Dr. Chamouin's experiments, in which he fed a number of kittens on boiled milk and an equal number of kittens on the same milk as it came direct from the cow or the goat. Those of the former category he found to be twice again as fat and healthy as those of the latter. A kitten, however, which was left to its mother was the fattest and healthiest of all, though this was due to the assiduous attention which the maternal instinct supplied, and which the experimenter pleasantly admitted was beyond the resources of the laboratory. Following up his demonstration, Dr. Chamouin examined the statistics officially issued by the town council of Paris as to the infantile mortality of that city, and finding that the chief cause of this was, directly or remotely, intestinal ailments, he prosecuted his researches still further, so as to include a comparison between those infants that had been fed on boiled and those that had been fed on unboiled milk. As he anticipated, he found a remarkable diminution in the death-rate of the former. His investigation was continued long enough to show that thousands of infants are annually safeguarded from intestinal disease and death by the precaution of boiling the milk on which they feed.—*Lancet.*

ENORMOUS GLANDULAR ENLARGEMENT NEAR THE GROIN IN THE RIGHT THIGH CAUSED BY MALIGNANT ULCERATION OF A MOLE.—Mr. Bland Sutton operated on a man, æt. 64, with a large mass in the groin, presenting the usual characteristics of enlarged glands, it was freely movable; the cause was a pigmented mole, situated just below and inside the knee, which had existed all the patient's life; it had begun

to ulcerate four years ago, after which the glands in the groin were noticed gradually to enlarge; there were nodules the size of a split pea in the midst of the pigmented ulceration. This case, Mr. Sutton remarked, was one in which a birth mark having taken on malignant ulceration epithelial cells are cast off and get to the glands, which probably have become pigmented and full of epithelial cells; the type of structure developed under these moles was aveolar sarcoma. The cause, he pointed out, was a small one for the trouble, but it was a good argument in favor of the removal of these moles. In operating, Mr. Sutton first removed the mole itself, cutting through the skin at some distance all round it, the internal saphena vein being divided during the excision of the ulcerated patch; he then carefully sewed up the rather large gap left in the skin. He next dissected out the large mass of glands by a straight vertical incision, having to make also a short one on the outside at right angles, owing to the size of the glandular tumor, about that of a cocoanut. The glands were found in a most disorganized condition, being much broken down, fluid spurting out on several occasions, and the dissection having to be carried down very deeply; in fact, after the removal the femoral vein could be seen lying bare in the wound. On subsequently cutting into the mass sufficient pigment was found, as Mr. Sutton remarked, to connect the two facts: the ulcerated mole and the glandular enlargement. A few pieces of suspicious tissue were dissected off, and the wound, which then was left perfectly clean, was accurately sown up, a drainage tube being left in.—*Medical Press and Circular.*

A CONTRIBUTION TO THE STUDY OF PUERPERAL ECLAMPSIA.—Goldberg, of Dresden, in the *Archiv für Gynakologie*, Band xli., Heft 3, and Band xli., Heft 1, draws interesting conclusions from 81 cases of eclampsia. Although more frequent in primigravidæ, the mortality is much greater in those who have borne children. Eclampsia beginning in pregnancy is most fatal; least so when it commences in the puerperal state. Profound disturbance of the nervous system is a more unfavorable symptom than the albuminuria, dyspnœa, cyanosis, and bad pulse. The most successful treatment is speedy delivery. The forceps is especially successful for mother and child. Version and extraction were also successful. Craniotomy was less valuable as a means of treatment. Cæsarean section was followed by septic peritonitis and death. Induction of labor was successful, as was also incision of a rigid os and extraction. Hot baths and packs, chloroform, chloral, and morphine were reliable agents. Large doses of morphine should be avoided, as collapse sometimes follows their use.—*American Journal of Medical Sciences.*

CHICAGO AND THE WORLD'S FAIR.—The existence of cholera in the United States either this year or the next would prove disastrous to the World's Fair. This result would be fatal if the impression became general that the water supply of Chicago was infected, no matter what the facts might be. The prevalence of typhoid in Chicago is already a matter of general knowledge, and its connection with impure water has been stated over and over again in the medical journals. The *Journal of the American Medical Association*, which is published in Chicago, says in its issue of July 23rd: "That it should be necessary, month after month, to boil and filter every pint of water that is used for drinking purposes in a city of more than a million inhabitants is a scandal of monumental proportions upon the city government." A friend who passed the last year in Chicago informs us that the water left standing in pitchers over night is so offensive that it cannot be used. The failure of Congress to pass an appropriation would not have been so serious a blow by half to the success of the fair as the continuance of the present condition of the city's water supply.—*Brooklyn Med. Jour.*

THE MEDICAL MISSIONARY.—A Hindoo, jealous of the encroachments of Western civilization on his traditional beliefs, when asked, "Which of all the methods of that civilization do you fear the most?" naturally enough evaded the question, remarking, "Why should I put weapons in the hands of an enemy?" At last he said, "We do not greatly fear the missionary schools, for we need not send our children. Nor do we fear their books, for we need not read them; nor their preaching, for we

need not listen to it. But we dread the doctors and the women. The doctors are winning our hearts and the women our homes; and when our hearts and homes are won, what is there left of us?" It is, in truth, with the advent of the medical man and the trained nurse that progress has been made in the reclamation of the backward Oriental, and the annals of missionary enterprise would lose half, and more than half, of their practical interest if these two factors of their work were omitted from the record.—*Med. Record.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

When a change of address occurs please promptly notify the Publishers, THE J. E. BRYANT COMPANY (*Limited*), 58 *Bay Street.*

TORONTO, OCTOBER 1, 1892.

TORONTO UNIVERSITY AND CLINICAL TEACHING.

The Montreal *Medical Journal* speaks as follows: "As we go to press, the report of the Standing Committee of the University of Toronto in the Faculty of Medicine, on the subject of hospital facilities, reaches us. It is most interesting reading, and shows that at last Toronto University has awakened to the fact that clinical teaching in the wards (not the theatre) of a hospital is a most important part of a medical education. The report leads us to infer that ward work is not a feature of the instruction given at the Toronto General Hospital, that the students have not the advantages they possess in English hospitals in the way of obtaining clinical clerkships and dresserships, and that thus they do not come into immediate contact with patients. Numerous recommendations are made for reform, and a system of bedside clinics after the manner of those given in London hospitals is advocated. . . They have gone to the United States, Great Britain, and the continent of Europe for information, but are apparently unaware that there is a hospital much nearer home where, ever since its foundation in 1820, clinical teaching in Medicine and Surgery has been carried on in the most efficient manner . . ."

It is rather humiliating to those who have watched with interest the steady and substantial advances which have been made in our methods of clinical teaching in the Toronto General Hospital during recent years to be served with such a dish as this. And yet we cannot blame our Montreal contemporary because it quotes the spirit, if not the letter, of the report referred to. It is most unfortunate that the committee should have conveyed the impression (surely without intention) that our hospital furnished poor clinical facilities and no bedside instruction. It is only fair to the committee to presume that its intention was not to belittle any work which had formerly been done, but to give effect to the views of the University staff in some matters of detail which were likely to increase the efficiency of the teaching, which was already good. It is to be hoped, however, that in the future the committee, in sending any of its reports to the world, will adopt methods of phraseology which are likely to do no injury to the Medical Faculty.

The following quotations from the first calendar of the re-established Medical Faculty of the University of Toronto will show that those in authority were endeavoring to make full provision for the various varieties of clinical teaching, and especially bedside instruction:

"The course of instruction in Clinical Medicine will be thorough and systematic. The students will be encouraged to examine carefully all classes of patients both in the outdoor department and in the general wards. The clinical clerks will be expected to keep accurate reports of all cases allotted to them. Regular clinical lectures will be held in the large theatre from 2.30 to 3.30 p.m., and limited classes will be taken through the wards at 11.30 a.m. and 1.30 p.m."

"Special attention will be paid to clinical instruction at the bedside, and wounds, fractures, etc., will be treated, as far as possible, in the presence of the classes, the surgical dressers being expected to do a large portion of the

work in applying suitable dressings, reducing fractures, etc."

"A systematic course of bedside instruction is given to limited classes of students, several such classes being taken through the wards every day from Mondays to Fridays inclusive. Smaller classes of students receive gynecological demonstrations on two days of each week."

It will thus be seen that in 1887 a good system was in operation, and, as a matter of fact, had been carried out by both schools in the hospital for several years. Fortunately, however, the various friends of clinical teaching do not consider that perfection has been reached (we hope they never will), but show a commendable desire to make some advancement in each and every year. While we are quite willing to admit that good clinical work is being done in Montreal, we still have a very decided opinion that for undergraduates no better course of clinical instruction in Medicine and Surgery was given on this continent than that given last session in the Toronto General Hospital, which happens, by the way, to be the largest and best-ordered institution of the kind in Canada.

THE MEETING OF THE CANADIAN MEDICAL ASSOCIATION.

The meeting of the above association, which was held in Ottawa, September 21, 22, and 23, was a fairly successful and certainly a very pleasant one. The numbers present at the different sessions were not large; indeed, on the morning of the first day the attendance was so small as to cast a certain gloom over the the meeting. On the same afternoon there was a large gathering assembled to hear the admirable address of the president, and the gloom was to a certain extent dispelled. Not altogether, however, as it happened that a majority of the members who were required to fill the programme of the afternoon were absent. This unfortunate occurrence called forth some strong words of censure, especially from Dr. Campbell, of Montreal.

Such conduct, when avoidable, is, of course, very objectionable, and richly deserves censure; but it will ever be well to exercise considerable caution in applying the lash under such circumstances. The serious emergencies which so frequently arise in the work of busy general practitioners must of necessity alter plans in a fairly large proportion of cases. If absentees, without careful or without any consideration, are to be accused of deliberate intentions to advertise themselves at the expense of association meetings, a large number will hesitate or refuse to promise papers for any special time. Those who have had much experience in such matters will realize how seriously a possibility or probability of such accusations would handicap the efforts of the officers in preparing a programme.

On the second day the attendance was large, reaching about one hundred. Montreal, as usual, sent a large contingent. Toronto, among outside places, stood a good second. The western part of Ontario was only fairly represented. From more distant parts the numbers were small, but those present extended a warm welcome to Dr. Chown, of Winnipeg, and Dr. Milne, of Victoria, B.C.

It was decided to hold the next meeting in London. Some thought that if the World's Fair were not postponed, it might be arranged in such a way that many could attend the meeting and go on to Chicago afterwards. Even without the big fair, it was thought an excellent place because of its position as a centre of a large and flourishing district. Dr. Sheard has done good service to the association in the past, and his unanimous election to the presidency gives general satisfaction. The following is a complete list of the officers:

President: Dr. Chas. Sheard, Toronto. *Vice-Presidents:* Ontario, Dr. Wishart, London; Quebec, Dr. Shepard, Montreal; British Columbia, Dr. Milne, Victoria; Manitoba, Dr. Chown, Winnipeg; Northwest Territories, Dr. Kennedy, Fort McLeod; Nova Scotia, Dr. Lindsay, Halifax; New Brunswick, Dr. Daniel, St. John; Prince Edward Island, Dr. McLeod, Charlottetown. *Local Secretaries:* Ontario, Dr. Waugh, London; Quebec, Dr. Desrosiers, Montreal; British Columbia, Dr. Lefebvre, Vancouver; New Brunswick, Dr. McLaren, St. John; Nova Scotia, Dr. Morrow, Halifax; Prince Edward Island, Dr. F. B. Taylor, Charlottetown; Northwest Territories, Dr. Cotton, Regina; Manitoba, Dr. Milroy, Portage la Prairie. *General Secretary:* H. S. Birkett, Montreal. *Treasurer:* W. H. B. Aikins Toronto.

The profession of Ottawa were very kind in entertaining the visitors. They gave a conversazione on the first evening in the Russell House, which passed off very pleasantly. On the second evening the members' dinner was given, also in the Russell House. About eighty seats were occupied, and all appeared to enjoy themselves.

THE PRESIDENT'S ADDRESS.

The able and carefully-prepared address of the president was heard with much interest. He first directed attention to the condition of things in medical educational matters twenty-five years ago, when the association was formed, and described the great advances which had been made since that time. He showed that in consequence of the formation of the Ontario Medical Council we had now a Central Examining Board with a high standard, instead of a number of examining bodies with low standards, which existed under the old régime. He referred to some elements of discontent among a section of the profession in Ontario on account of certain regulations adopted by the council, and advised caution in attempting to make important changes. At the same time he showed a conciliatory spirit, and suggested, as he had already done at the last meeting of the council, that a peaceful solution of the difficulties might be reached through a friendly conference between representatives of the profession and the council respectively.

He then discussed the very important question of medical reciprocity between the various provinces of the Dominion. This has been considered a burning question for many years by a majority of physicians in all sections of Canada. While all think it exceedingly unfortunate that no such reciprocity does exist, still all who have carefully studied the question are ready to admit that the subject is beset with many serious difficulties and complexities. We hope, however, that they are not insurmountable; but that the efforts which are now being put forth, especially by prominent members of the profession in the Provinces of Ontario, Quebec, and Manitoba, to bring about a better condition of things will be successful.

We have much pleasure in referring our readers to the text of the address, which appears in this issue, and is well worthy of a careful perusal.

Clinical Notes.

DIPHTHERIA — DEATH FROM EMBOLISM OF BASILAR ARTERY.

BY A. M'PHEDRAN, M.B., TORONTO.

The following case will prove of interest on account of the unusual complication that caused the death. Grace M., æt. 12, became ill with pharyngeal diphtheria on May 30th last. The attack was a moderately severe one, but by June 4th she was convalescing satisfactorily, the throat having cleared. At 3 o'clock on the morning of the 5th she took nourishment, and expressed herself as feeling very well, desiring her nurse to lie down as she herself was going to sleep. A few minutes later she breathed deeply, and by the time the nurse could reach her bedside she was unconscious. Then coma deepened, and she died at 9 a.m.

At the autopsy a firm white embolus was found lodged at the bifiurcation of the basilar artery; its origin could not be ascertained. The heart was not examined, but neither it nor the kidneys had shown any signs of disease.

Correspondence.

COCAINE IN HAY FEVER.

Editor of THE CANADIAN PRACTITIONER :

SIR,—There recently appeared in your journal a prescription for the combined use of morphine and cocaine as a snuff in hay fever. While that formula may be a success, I feel bound to say that it is one which will well bear watching, for it involves a risk with some cases that it would not be wise to incur. Morphinism from morphia per nares is possible, as a notable case under our care some years since attests. *Vide*, "A curious case of opium addiction," *Maryland Med. Journal*, 29th March, 1884; reprint at command.

While this case is unique, so far as we know, those from cocaine are less so, despite the mistaken and mischievous statements of Hammond and Bosworth as to the non-risk of inebriety from cocaine.

In a paper on "Cocainism," soon to appear, we have cited sixteen cases—chronic cocaine taking; no past or present rum or poppy using—in several of which its use, per nostril, was the genesis of addiction.

J. B. MATTISON, M.D.,
Med. Director Brooklyn Home for Habitues.

Book Reviews.

The Mediterranean Shores of America: or, The Climatic, Physical, and Meteorological Conditions of Southern California. By P. C. Remondino, M.D., member of the American Medical Association, of the American Public Health Association, of the State Board of Health of California; vice-president of the California State Medical Society, and of the Southern California Medical Society. Illustrated with forty-five engravings and two double-page maps. In one handsome, royal-octavo volume, 176 pages. Extra cloth, price $1.25, net; cheaper edition, bound in paper, price 75 cents, net. Philadelphia: The F. A. Davis Co., publishers, 1231 Filbert street. Toronto: J. A. Carveth & Co.

So many from all parts of North America go to Southern California for the purposes of health that a book such as this is likely to create considerable interest. This region has a variety of climates, and its intending visitors would do well to obtain some definite knowledge respecting them before leaving their homes. This work gives information which is sufficiently explicit to make it valuable. We are pleased to note that the author advises great care and prudence on the part of the patient, who should not, in his opinion, depend too much on climatic effects. The book is well printed and illustrated, and the price is certainly very reasonable.

Annual of the Universal Medical Sciences. Edited by Charles E. Sajous, M.D., and seventy associate editors. Illustrated with chromolithographs, engravings, and maps. Vol. V., 1892. The F. A. Davis Company, publishers, Philadelphia, etc. Toronto: J. A. Carveth & Co.

This book, like the corresponding volume of the series for previous years, is devoted to the subjects of general, experimental, and electrotherapeutics, climatology and hydrotherapy, hygiene, monstrosities, anatomy, and physiology. The object of the authors is to furnish a complete digest of the advances and recent discoveries in medical science made during the past year. Each subject is treated by a specialist in that department, which insures accuracy in detail. The volume, if possible, surpasses in excellence those of previous years, and is well worth the attention of every physician who wishes to keep himself familiar with modern medicine. At the close of the volume is a general index of the whole series, giving also authorities and a synopsis of the treatment of each disease.

A Text-Book of the Principles and Practice of Medicine. For the use of students and practitioners. By Henry M. Lyman, M.D., Professor of the Principles and Practice of Medicine in Rush Medical College, Chicago. In one very handsome octavo volume of 926 pp., with 170 illus. Cloth, $4.75; leather, $5.75. Philadelphia: Lea Brothers & Co., 1892. Toronto: J. A. Carveth & Co.

Professor Lyman is well known in the United States as an eminent physician, teacher, and author. He has endeavored in this work to give the fruits of his own observation and experience, and also the substance of the latest editions of the works of Ziegler, Hallopean, Eichorst, Cornil, Babes, and the collaborateurs of the *Traité de Medicine* The author's method of writing is very concise, but quite clear. There is no attempt at anything brilliant, but the text is essentially orthodox. The directions as to treatment are brief, but admirably definite, and give evidence of sound common sense and good judgment. It is a good book for both students and practitioners.

Therapeutic Notes.

THE BEST NUTRITIVE ENEMA.—Ewald, as a result of experiments, found that eggs, even though not peptonized, were to a considerable extent absorbed by the rectal mucous membrane. According to the *Mercredi Medical* for April 1st, Huber, of Zurich, has recently repeated Ewald's experiments in Prof. Eichorst's clinic, and announces that the absorption of raw eggs is greatly aided by the addition of common salt. The salt is well borne, and causes, as a rule, no irritation of the bowel. He considers that eggs beaten up with salt, in the pro-

portion of fifteen grains to each egg, are the best for nutritive enema. His method of procedure is as follows: Two or three eggs are taken, and thirty to forty-five grains of salt are added. They are slowly injected by means of a soft rubber tube, carried as high up the bowels as possible. Three such enemata are given daily. An hour before each enema, the rectum is cleaned out by means of a large injection of warm water.—*N. Y. Med. Times.*

THE USE OF CREAM.—Very few housekeepers, says *Hall's Journal of Health*, can realize the nutritive value of cream and understand its superiority to any other solid fats in permitting the gastric juice to mix with it in the most perfect manner, and in this way aiding and hastening digestion. It is invaluable in the case of invalids, for it serves as nutriment in a very available form. It is superior to butter, because it contains more volatile oil than butter made from it. It is frequently ordered by the physician for those consumptively inclined, for those with feeble digestions, for aged persons and those who suffer from impaired circulation, cold feet, and who feel chilly for want of nutriment. No other article of food gives such satisfactory results.—*Med. Mirror.*

ALEURONAT FOR DIABETICS.—Aleuronat is the name of a vegetable albumin introduced by Hundhausen, which Erbstein has found very useful as a substitute for bread in diabetic cases. It is a dry yellow powder, without taste or smell, containing eighty per cent. or more of nitrogenous elements and only about seven per cent. of carbo-hydrates. He employs it in preparing soups and other dishes, as well as in making bread, which shows sixty-six per cent. of nitrogenous matter.—*Med. Record.*

THE DYSPNŒA OF ADVANCED BRIGHT'S DISEASE.—Dr. Steell thinks that common dyspnœa of advanced stages of Bright's disease is due to heart failure, and is not toxæmic. He points to the benefit obtained in many such cases from hypodermic injection of morphia as inconsistent with the presence of toxæmia. He recommends digitalis, or, when it fails, strophanthus, citrate of caffeine, nux vomica, or strychnia. In paroxysmal dyspnœa he says the nitrates are disappointing; he recommends morphia, enjoining caution in its use, and its combination with atropine.—*The Birmingham Medical Review.*

FOR HEMORHOIDS:

℞. Morphinæ . . . gr. v.
Hydrarg. chlor. mit. . ʒj.
Glycerin. . . . . ʒiv.
Bismuth subnitrat. } . aa ʒjss.
Vaselin. }

M. et ft. unguent.
S.—Apply topically.
—*Allingham in Medical News.*

FOR DYSENTERY:

℞. Morphinæ sulphat. . gr. j.
Magnesii sulphat. . . ʒj.
Acid. sulphuric. dil. . fʒij.
Aquæ . . . . fʒiv.—M.

S.—A tablespoonful every three hours.
—*Bartholow in Medical News.*

Miscellaneous.

IF you wish to remove a deciduous tooth and through fear the child will not permit it, slip a piece of rubber tubing over the crown down to the neck of the tooth, and in a few days the tooth will be so loose that it can be extracted with the fingers. This is given upon the authority of Dr. W. H. Eames, and is certainly worth trying.—*Dominion Dental Journal.*

A SEMMELWEISS MEMORIAL.—It is proposed to establish an international memorial in honor of Semmelweiss, who in 1847 recognized the infectiousness of puerperal fever and adopted practical measures that led to a decided reduction in the mortality from this source.—*Med. News.*

THE *Chicago Medical Recorder*, edited by Dr Archibald Church, and previously published by W. T. Keener, of Chicago, is now being published by the M. H. Kauffman Medical Publishing Company.

NAPOLEON'S PULSE.—According to Corvisart, the normal pulse rate of Napoleon Bonaparte was under forty beats to the minute.

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A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

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TORONTO, OCTOBER 15, 1892.

Original Communications.

UNIVERSITY OF TORONTO BIOLOGICAL BUILDING AND THE PARK HOSPITAL.

ABSTRACT OF ADDRESS

DELIVERED BY MR. MULOCK, VICE-CHANCELLOR,

At a Public Meeting of Graduates held in Toronto, 12th September, 1892.

Mr. Chairman, and Fellow-Graduates:

With feelings of deepest sorrow, not on my own account, but because of our common alma mater, which for over a third of a century has been my idol, I appear before you this evening. Unkind toward myself as has been some of the criticisms of those whom I wish to believe mean well by the university, I would not out of any personal considerations take part in a controversy wherein the interests of the university appear for a moment to have been forgotten by my critics. But feeling, as I do, that a grave university issue is involved, I, for the first time since occupying the responsible and onerous position of vice-chancellor, deem it my duty to sink personal considerations and take my place in the ranks by the side of my fellow-graduates on behalf of an institution which, much as it has already achieved, has yet scarcely entered upon the threshold of its sphere of possible usefulness.

THE BIOLOGICAL BUILDING.

But my critics say that too much money has been spent on biology and on the medical faculty. Let me analyze this charge. In 1878, when I became a member of the Board of Trustees, I found the capital of the university impaired by nearly $40,000, the result of the erection of the main building. In 1883 we had wiped out this deficit, and in the meantime had entered upon our policy of university expansion. In the fall of that year I made, through Senator Macdonald, then a member of Victoria and of our Senate, a proposal which two years thereafter, in a modified form, was approved of by the General Conference. At this period our facilities for teaching the sciences were lamentably deficient; biology, a subject of great and rapidly-increasing importance, having, as you all know, the merest apology for a laboratory. Well, sir, every one who has given any thought to our requirements felt that in the near future, confederation or no confederation, we must erect science buildings. And it was well understood during all the negotiations that resulted in confederation that this university would endeavor to make *adequate provision for science teaching*. In fact, this understanding was, I believe, one of the most important factors in bringing about the most important result. With the prospect, then, of such a demand upon our resources, I strove to husband them in order to be able to implement our implied obligations in respect of confederation. Shortly after the General Conference had, in 1885, endorsed confeder-

ation, I took steps looking to the development of the science side of the university. The first subject to deal with was biology, and with money derived from the release to the government of our interest in the old asylum site in the park, and savings from our income, we were able to erect the easterly wing of the biological laboratory. This in no way impaired the income of the university, the asylum site having been, as all our graduates know, a wholly unproductive asset. But this east part simply provided certain lecture rooms and laboratory accommodation, and it was part of the general scheme that the westerly wing should provide accommodation for the museum. When, therefore, the completion of the westerly part was being undertaken, the medical faculty having been in the meantime established, it appeared to me a most economical arrangement that the attic flat should be utilized for anatomical purposes. Our medical faculty had been in operation more than a session, long enough to make manifest the disadvantages under which we were laboring, part of the work having to be carried on in the old building on Gerrard street opposite the hospital, and another part in the university grounds. To make this clear, let me explain the course of study in medicine. Our curriculum requires students to take the science work, anatomy, and physiology in the first half of their course. This involved, according to the existing arrangements, their daily attendance at science lectures in the university grounds, and also attendance for dissecting and other purposes during the same period at the old buildings nearly two miles away. Thus situated, it was practically impossible to carry on these two branches of work, the science and the anatomical, at these remote points with any degree of satisfaction. Students were unwilling to lose the time involved in traversing between these two point daily, to say nothing of the loss of the broken parts of each day. There are always, as every student knows, necessary interruptions between lectures, they rarely follow each other without a break of time, and the only practical solution to the difficulty was to make provision whereby students in attendance on the science lectures could, without interruption, devote the rest of their time daily to the dissecting room and other work of their course. Manifestly, the proper solution to the question was to provide dissecting-room and other accommodation near to where the science work had to be done, whereby the students might fill in broken hours by dissecting and attending lectures on anatomical and other professional branches of their study. Such an arrangement would be an enormous saving of time to the student, and leave them in a better position to take advantage of our science facilities.

The opportunity then arrived with the erection of the museum wing of the biological laboratory; the top or attic flat, which otherwise would have been of little or no use, having been converted into dissecting and bone rooms, and connected by a hoist with a room in the basement where material could be stored. There has been so much misrepresentation in regard to this work that I invite all to examine the building for themselves, and I am sure they will come away convinced that a wise and economical arrangement was arrived at, and there is not a university man of any breadth of mind that would undo the work if he could. But it is said that secrecy was observed. This is quite true. I knew full well from my experience with the Park Hospital that if publicity were given to the fact that we contemplated having a dissecting room in the park building, we would encounter local opposition which would paralyze the movement as it had done the hospital scheme. Hence the caution observed. But it did not occur to me that the narrow view now advanced would be taken that the state should render no assistance to medical science. Why, sir, when the Toronto Medical School, being the medical faculty of Victoria, at the time of confederation, as part of the understanding of the great movement, ceased to exist, and when the Legislature by the Confederation Act authorized us to establish teaching faculties in medicine and law, not one word appeared in the act suggesting that they were to be on any footing different from the arts faculty, and when the Senate unanimously and promptly acted upon the powers so conferred, and established these faculties, I regarded such legislation and action as simply a mandate to do what our circumstances warranted towards putting them on a reasonably sound basis, having due regard to all other demands upon our resources. It should be borne

in mind that the object of our Senate in identifying the university with medicine was not simply to qualify persons to practise medicine. That followed, it is true, as an incident; but we had a more far-reaching, a more public-spirited, aim. On this point let me quote from the report of the medical faculty of our Senate, adopted in 1887, recommending the establishment of our medical faculty, and which report, I may say, the Senate unanimously adopted. This report, indicating what should be the aim of a great university like ours in seeking to advance medical science, uses these words: "Leading members of that institution (referring to the Toronto School of Medicine) expressing entire concurrence with the opinion entertained by the authorities of the University of Toronto, that in the interests of medical science, and therefore of the general public, it is the duty of the Provincial University at the earliest possible moment to establish a teaching faculty in medicine, instead of permitting that important branch of education to remain almost exclusively in the hands of proprietary corporations, liable to be managed with a view to pecuniary profit to the proprietors rather than to the cause of medical science. Your committee do not desire to be understood as expressing an opinion that such has been the policy of any medical school, but the circumstance that the efforts of this university, extending over a long period of years, to encourage a higher standard of medical education appear not to have been practically seconded by any medical school has convinced your committee that co-operation can be secured only from a teaching staff directly under the control of the university. Such an arrangement, having for its object, not private gain, but the general interests of the people, is best calculated to promote the highest interests of medical science." Personally, I would not have advocated the establishment of a medical faculty had I supposed that it was simply to enter the arena in competition with other medical schools, and without assistance be compelled to confine its work to the old methods. Speaking in December, 1890, at a public meeting in the biological laboratory, in the presence of hundreds of fellow-graduates, when, I think, the westerly wing was either completed or approaching completion, I expressed myself as follows: "In the opinion of the university, any scheme of medical education which deals simply with the curative, neglecting the preventive, aspects of medical science is radically defective; and in that view nearly fifteen years ago the university had endeavored to engraft upon the requirements of a medical education a more thorough acquaintance with the subject of biology acquired by laboratory work, use of the microscope, and otherwise. The Senate had observed on the medical side of the state-aided historic universities of Europe the inauguration of a great movement; that the microscope, a supreme instrument of research, was disclosing many hidden truths of nature and revealing causes of disease, thus preparing the way for the discovery of remedies. Accordingly, we introduced changes in our curriculum which, we hoped, would promote study in the direction referred to; but after long years of waiting were forced to the conclusion that it was hopeless to expect such results from medical schools having no public endowment. We have not one unkind sentiment towards any such institution, and should ever rejoice at their progress and development; but it was unreasonable to expect the work of the state to be carried on at the expense of private individuals. Yet this necessary work had to be undertaken, and no course remained for this university except to follow the example of the great universities of Great Britain, Germany, Austria, France, and other continental countries, which, being largely aided by the state, were not merely parasites on the educational system, but were actively engaged in contributing towards the extension of medical science. Speaking of parasites, he would be a bold man who would assert that all diseases of parasitic origin were preventable or curable; but there did appear reasonable grounds for believing that the darkness which had hitherto enveloped the scientific searcher after truth in investigating causes of consumption and allied diseases was about to pass away, and that the training acquired in the biological laboratory was about to confer on mankind benefits hitherto without a parallel. The state aid rendered by France had given the world a Pasteur, while Dr. Koch drew his inspirations from the state-aided laboratories of the fatherland; and if the coming graduates of Canadian universities, in the practise of their

profession, were to contribute towards medical science, it was essential that their medical education be of a character which, apart from qualifying them to apply existing methods, would direct their minds towards research. In view of the great possibilities, do you think that any medical student of to-day should pass into the ranks of his profession without having had the opportunity of acquainting himself with what is already known to the science of bacteriology, the development of which must largely rest with the students to-day? The University of Toronto at least took that ground, and I would ask what higher duty could devolve upon the state than thus seeking to provide for the maintenance of the health of the people by preparing men to investigate the causes of disease and their prevention? The world is wont to speak of the progressive character of medical science; but if no encouragement or attention were given to original research, and if all were content simply to apply such knowledge as was now possessed, then medicine would stand still. Diseases heretofore regarded as incurable would continue incurable, and those so afflicted would live without hope. We could not admit the soundness of such a proposition. It was the duty of the state to seek for the causes of disease with a view to its prevention and cure, and as a university belonging to the people, existing but for the people's welfare, I can conceive of no direction wherein its energies could be better directed in order to promote the public good than by seeking the advancement as well as the diffusion of medical science."

Sir, these sentiments, when uttered in a university meeting, surrounded by university men on all sides, met with a hearty, I believe a unanimous, response. They still represent my views, and it was out of my anxiety to identify this university with efforts to advance medical science and benefit my fellow-men that I sent Prof. Ramsay Wright, not at the university's expense, to Germany to study under Dr. Koch; yet even that personal act of mine has been resurrected to do action against me. Suppose some man trained under our new system were to discover a method for the successful prevention or cure of cholera, think you any citizen then would take the position that that result was acquired at too great expense, if even it involved the expenditure of a few thousand dollars of university money on some biological or medical laboratory? (Cheers.) Why, sir, if I had supposed that the policy of this university in establishing a medical faculty was simply to unite together a number of professional gentlemen, call them a medical faculty, and leave such faculty without resources, laboratories, lecture rooms, or appliances, or the first requirements wherewith to carry on the work whose very necessities would have compelled such a faculty in a struggle for existence to seek to turn out the largest number of practitioners at the lowest possible cost, thus degrading instead of elevating the cause of medical science, I would have, and, I venture to say, the public would have, protested against such a prostitution of university power, and the medical faculty of this university would, I think, never have had an existence. (Cheers.) However, in deference to criticism, the university is now being fully compensated for the expenditure made, however trifling, on behalf of the faculty, a rental being charged against the medical faculty. Consequently, such an expenditure being now a revenue-bearing asset, the university's income is not thereby encroached upon to the extent of a single dollar. Thus, at *no cost to the university*, our medical faculty has been enabled to carry on its work both economically and efficiently, to the great advantage of the university, and yet my critics refuse to have any regard to results, but, in what I believe to be anything but a fair or just spirit, denying me credit for anything, denounce me for action absolutely disinterested on my part, intended solely for the benefit of the university, and which will, I am satisfied, be of incalculable advantage to her. (Cheers.) Rarely has the refining influence of university education so failed to awaken a desire to place a charitable construction on the action of others.

THE PARK HOSPITAL.

Again, I am said to have alienated a vast area of university lands for the establishment of the Park Hospital. This charge I fully covered in a communication to the Senate in June last; but in case you may not have read it, I will briefly review that transaction. Shortly after the Senate established the medical faculty, namely, in the fall of 1887, the late Senator

Macdonald, then a member of our Senate, a man of most generous impulses, and a staunch friend of this university, informed me that he desired to found a hospital in connection with our university. He told me he had promised his daughter shortly before her death to give the share of his estate which she would have received, had she survived him, towards a hospital, and, being deeply interested in medical science, he felt that such an institution in connection with our university would be of great advantage to the medical faculty, to the university, and the whole public. I need not trouble you with all the details. Suffice it to say, that Mr. Macdonald's original proposition was that the university would give a free site by conveying land in fee simple to trustees for the hospital, and in consideration of such grant of land he would give in cash $40,000 towards the erection of the building, the trustees to maintain the hospital in connection with this university, which was to have control and management of all buildings erected on the land. In addition to the great indirect advantages accruing to the university, she was to be paid by students, for the privilege of attending this hospital, such annual fees as the Senate prescribed. Under this latter provision the university would receive a direct return in money for the use of the land, the amount of which from our prosperous medical faculty, ever growing in public favor, would soon exceed any other possible return from the land, whether sold or leased. I think I have as accurate an idea as any person as to the value of the two lots included in this trust, and have no hesitation whatever in declaring that by no other possible way, by sale or lease, will the university ever derive as large an annual income from these lots as she will by charging fees to medical students for the privilege of attending the hospital when erected thereon; and I regret that, while those objectors have given exaggerated ideas as to the value of lots, they have, as a rule, carefully abstained from alluding to this provision for adequate money compensation. But to return to Senator Macdonald. His views and conditions were embodied in a draft agreement, a copy of which I now hold in my hand. This draft document purports to be made between John Macdonald, of the city of Toronto, in the county of York, merchant, hereinafter called the donor, of the first part, and Her Majesty the Queen, represented for the purposes of this agreement by John Edward Berkeley Smith, the bursar of the university and colleges at Toronto, of the second part, and recites as follows:

"Whereas the said party of the first part, herein described as the donor, by reason of his love for his daughter, Amy Macdonald, now deceased, and from a desire to perpetuate a memorial of her good will and sympathy towards the sick and suffering, and also from a desire to promote the interests of medical science and surgery, has resolved to dedicate the sum of money hereinafter named in perpetuity for the purpose of founding a hospital, to be forever known as the Amy Macdonald Hospital, subject to the provisions and conditions hereinafter set forth, and amongst others upon the condition that Her Majesty, represented as aforesaid for the purposes of this agreement by the bursar of the university and colleges, should set apart and appropriate certain lands, being those hereinafter particularly described, to be held along with the said sum of money upon trust for the purpose hereinafter set forth of the said Amy Macdonald Hospital . . It is hereby agreed and declared that the trustees in whom the said lands and said sum of money are to be vested, etc., shall stand seized of the said lands and of the said sum of money for the erection of a hospital upon such portion of said lands as they shall determine, to be known and to be called the Amy Macdonald Hospital, which hospital and any extension thereof or additions thereto are to be forever hereafter appropriated and used for the treatment of patients suffering from all forms of disease other than those that are contagious, infectious, chronic, or incurable, and also for patients requiring surgical treatment, so that the establishment and perpetuation of the said hospital may not only be the means of relieving sickness or suffering among such patients, but may also serve to promote the interests of medical and surgical education in connection with the University of Toronto."

And the document, amongst other provisions, then provides that the University of Toronto shall have the right from time to time to prescribe and fix the fees to be paid by the stu-

dents to the university for the use of the hospital, as I have heretofore mentioned.

Well, sir, Mr. Macdonald subsequently came to the conclusion that it would be advisable to change the name of the hospital, and he wrote to me on the 15th day of November, 1887, the letter, in his own handwriting, signed by himself, which I am about to read: "On looking over the draft agreement, after our last interview in my office, I wrote to Mr. Macdonald (the solicitor) suggesting the elimination of the clause having reference to free beds, feeling that it might prove a source of embarrassment. This he undertook to do. Since then the matter has been much in my mind, and I have come to the conclusion that it would be best to abandon that which was really the incentive to the offer, namely, the association of the name of my dear child with the institution. This will not affect my offer, which still remains, but which can, I think, be put in a form which will be more likely to make the institution from the very first worthy of its location, worthy of the city. . . ."

Well, sir, that draft agreement, with Senator Macdonald's letter, I submitted to the Board of Trustees of the University of Toronto at their meeting held on the 18th November, 1887. There were present the following members of the Board: Sir Daniel Wilson, Judge Patterson, Mr. Hoskin, Mr. A. H. Campbell, and myself. The following resolution was unanimously adopted by the board: "Resolved, that the trustees of the University of Toronto gratefully acknowledge, on behalf of the citizens of Toronto as well as the university, the gift of $40,000 from the Hon. John Macdonald as a generous contribution towards the extension of hospital accommodation, the necessity for which is a consequence of the growth of the city, the advancement of medical science, and the promotion of thorough and medical education. The trustees concur with Mr. Macdonald in the hope that the project thus initiated will result in the establishment of an institution which will from the first be worthy of its location in the city of Toronto, and equal in all respects to the best institutions on this continent. They share the confidence that there will be found among our citizens both the ability and the will to contribute the remainder of the funds necessary to successfully accomplish his benevolent and patriotic project, and they agree with him that the amount provided for the building and equipment of the hospital should be at least $150,000. To provide for the erection and management of the hospital, the trustees propose to act upon a suggestion of Mr. Macdonald by arranging for the appointment of a committee of citizens, in whom as a corporation the property shall be vested, and subject to whose control the work of the hospital shall be carried on. . . ."

Well, sir, the action of the board was duly announced in the public press. The resolution to which I have referred was set forth in full, and the utmost publicity given to the whole scheme. The precise piece of land was not determined upon at this time, but even then Senator Macdonald had in contemplation the site finally selected. You will observe, then, from the action of the Board of Trustees that the board by its resolution committed itself to Senator Macdonald's proposition, namely, that the university was to provide the land and he to contribute his $40,000. That proposition was assented to by our Board of Trustees, and was substantially carried out some two years later. I will not weary you with unnecessary details, but how it was carried out is correctly stated in my communication to the Senate, an extract from which I beg now to read to you:

"Thus matters remained until I received an intimation that Senator Macdonald was seriously ill, and desired to see me. Accordingly, the next morning being the 1st of January, 1890, I called upon him, and was shown to his bedroom. He there informed me that he had been dangerously ill, and, though then apparently better, that he was in a most precarious state of health; that during the crisis through which he had been passing his mind had continually dwelt upon his uncompleted promise made to his dying daughter to contribute towards the founding of a hospital the share in his estate which she would have received if she had survived him, and he had concluded to agree to the price placed on Wycliffe College property rather than risk further delay, and as soon as he felt able he would endeavor to place the $40,000 forthwith at the disposal of the trust, when he hoped

I would press the matter to a conclusion without further delay.

"He reminded me that he intended, as he had often told me before, to increase the amount by his will, and impressed me with the intensity of his anxiety for the earliest possible completion of the purchase, and with the danger arising from delay, concluding his reference to the condition of his health by informing me, to use almost his own words, that he felt that there was a very narrow borderland separating him from his daughter, to whom on her deathbed he had made the promise in question. I assured him that as soon as he advised me that the cash payment of $40,000 was at the disposal of the board I would use all possible despatch in pressing the purchase to a completion. He made one further request of me, which I hope may be respected. He desired that over the main entrance, which he thought might be near the head of McCaul street, there be placed these words, 'He healed them all.' This ended my interview, and I never afterwards saw him alive.

"I felt that there was not a moment to lose, and that even a day's delay might jeopardize a scheme which appeared to me full of promise and usefulness, both to the suffering public and to the university as a teaching body. I heard nothing further on the subject until Thursday evening, the 2nd January, 1890, when on my return to Toronto, having been absent during the day attending the funeral of my late partner, Mr. Tilt, I was called to the telephone by one of Mr. Macdonald's sons, who told me that his father having arranged to pay over at once the $40,000 the son had attended at my office with the amount during the day, but that he had learned I was out of town, that he had so reported to his father, who seemed much depressed in consequence, and that he was still awake and anxious to know whether, now that the finances were arranged, the transfer of property could be at once effected. I told the son to assure his father to the effect that I would press the matter to a completion with all possible speed, and the next morning I instructed our solicitors to prepare the papers. That day or the next morning I called upon the Minister of Education, and reported to him the situation. I told him Mr. Macdonald had assured me of his intention to increase the amount by his will by giving to the hospital the share in the estate which his daughter would have taken had she survived him. He knew perfectly that the scheme simply secured at once the promised cash gift of $40,000 (in fact, he went with me to Mr. Macdonald's warehouse to secure the money), and that the expected addition thereto depended upon Mr. Macdonald's will.

"I discussed with the minister the probable consequences of delay, and he agreed with me that we would not be justified in adopting any course that involved delay."

The Vice-Chancellor then gave details as to the payment of the $40,000, the purchase of Wycliffe College, and the lease of park lots 8 and 9 to the Park Hospital trustees, and spoke as follows about certain clauses of the lease:

"The hospital is practically under the control of the Senate, and available for medical educational purposes as it may determine, and I venture to assert that if the scheme is not impaired the university will in due course receive by way of rent from fees of students attending this hospital quite as much money, if not more, than she could realize either by selling or leasing the land. There are those whose opinions are of value who think that an hospital forms a necessary part of the equipment of every efficient medical faculty, and in proof of this it is only necessary to remind the Senate that the great medical schools of Great Britain, the United States, and Germany have control of hospitals, and whatever may be intended I fear that an assault on the hospital in question will be regarded as aimed at our medical faculty. I therefore trust that the Senate will first decide whether the presence of the hospital in question is of any, and, if so, what service to the university. There can be no conflict between the university and the hospital trustees. They hold office at the will of the Senate, and can make no disposition of the property without the consent of the Senate, which thus, having full control, can by its action determine the fate of the hospital. If the Senate requires a surrender of the College-street lots, in whole or in part, it can, I think, attain that end by action in the Senate, uncontrolled by an outside body; but I trust that before arriv-

ing at such decision the most careful consideration will be given to the whole subject. It was but in the interest of this university that I identified myself with the hospital scheme. I believe in the medical faculty, and earnestly desire its success. I have no sympathy with those who contend that no public aid should be given towards the advancement of medical science. It is a view to which I personally cannot give my assent; and even if the hospital scheme cost the university something, which I contend in the end it will not, I consider it would be worthy of fair consideration. The time will come when I think you will be unable to maintain your medical faculty unless you have control of an hospital. Already Montreal has become a great hospital city, and it behooves us and all medical schools in Toronto to make Toronto a great hospital centre, otherwise our students will seek elsewhere those advantages not within their reach at home. As to my own personal connection with the establishment of the hospital, and to which some are inclined to take exception, I trust that it will not be allowed to prejudice the scheme. Some may approve of the scheme and disapprove of my course in connection therewith. To them I would say, condemn me if you like, but not the scheme, if it is itself deserving of approval."

A REPORT OF THREE CASES OF SUPRAPUBIC LITHOTOMY, WITH REMARKS.*

BY EDMUND E. KING, M.D., C.M. VICT.; M.D. TOR.; L.R.C.P. LOND.

Surgeon St. Michael's Hospital; Physician House of Providence and Home for Incurables.

Mr. President and Gentlemen:

In presenting a report of three cases of suprapubic lithotomy, I do not propose to weary you with the history and minute details of the operation, with which you are all familiar; but simply to call your attention to the peculiarities in these cases, and to enlarge on some of the unusual features that are met with, together with some of the yet unsettled points of subsequent treatment.

CASE NO. 1.—R.A., æt. 37, male, referred to me by the late Dr. W. H. Henderson.

Family history: Father died by accident at the age of 55; mother suffered from fistula-in-ano, does not know cause of death; one brother died in infancy; two sisters died, one in infancy, the other after she had grown, but does not know age nor cause of death in either case.

Previous history: He had had the usual diseases of childhood, but no urinary difficulty until 1885, he thinks. The first symptoms that he noticed was the passing of gravel, and on two occasions small calculi, one about one-third of an inch long and the thickness of a rye straw, the other smaller. In neither case was the appearance of the stone preceded by nephritic colic. Possibly it was in 1887 when he first had to rise at night to void urine, but this was not a constant symptom until October, 1889, from which time his present illness dates.

Present illness: He then began to notice a severe scalding along the whole of the urethra; the night urination was more regular; there was no pain during the act, simply scalding. No important change occurred until July, 1890, when pain became apparent in the bladder, which he describes as similar to that of two raw surfaces rubbing against one another. Desire to urinate became more frequent night and day; a large quantity of mucus was passed after the urine. Subsequent to an examination of the bladder with the searcher, a large quantity of blood and mucus passed for some days. This continued until October, 1890, when he was confined to bed by a typhoidal (?) attack, followed by a relapse in December of the same year. About the first of February, the patient states, a large quantity of thick mucus or pus was evacuated one night; he thinks the quantity would amount to about one pint. The bladder had been again searched for stone, but none found; medical treatment had been resorted to, but without relief. At the present time he has little control over the act of micturition, and is unable to retain urine more than fifteen minutes at a time; it will then be voided involuntarily. The desire to urinate is always worse at night when lying down. He has lost between thirty and forty pounds in weight during the past year and a half, and is in a highly nervous condition. When I first saw the patient, on the 17th of April, 1891, I found him an emaciated, sallow, highly nervous man, apparently 45 years of age.

* Presented to the Canada Medical Association, Ottawa.

On examination, a stricture was found five inches from the meatus, of large calibre, the prostatic urethra exceedingly tender; a Jacques catheter was with great difficulty introduced into the bladder, and gave rise to much pain. The prostate, examined per rectum, was exceedingly sensitive. The patient was placed on ten grains of salol every three hours, and directed to drink large quantities of carbonated water. On the 19th I washed out the bladder with a one per cent. solution of creoline, examined the urethra with the endoscope, detecting an ulcerated spot five inches from the meatus, where the sound had located the stricture. I was unable to pass a solid instrument into the bladder owing to pain produced by the attempt. The bladder was washed with the one per cent. creoline solution during the next three days, and he could retain his urine during the day for seventy minutes with some effort; no improvement at night.

On the 22nd, Dr. John Caven administered chloroform, and Dr. Milman was present when I examined the bladder with the cystoscope. The bladder would hold scarcely four ounces of fluid, and when distended with this small quantity a distinct tumor was felt on the right side of the median line above the pubes. It became more apparent when pressure was made on the bladder per rectum. It could be grasped by the fingers, and was about four inches in diameter. While examining with the cystoscope its beak ran against the calculus, which was situated in a sack in the upper and back part of the bladder. The cystoscope could not be utilized for viewing on account of the spasmodic contraction of the bladder.

On the 27th of April, assisted by Drs. W. Lehmann, W. H. B. Aikins, and J. Caven, I did the suprapubic section. I had succeeded in getting six ounces of fluid into the bladder, the rectal bag introduced and dilated with ten ounces of water. No vessel required ligatures, only one large vein presented in the abdominal wound, which was pushed out of the way. The rectal bag was ruptured by severe straining at this stage of the operation, which necessitated the raising of the bladder by the fingers of one of the assistants passed into the rectum. The peritoneum was pushed out of the way with very little difficulty, two stitches passed through the bladder walls, and an incision made between them. The stone was felt in the upper and back portion of the bladder, contained in a sac. It was impossible to remove it with the fingers, and the forceps were used. The bladder was thoroughly washed out, a double drainage tube introduced, and the abdominal wound drawn together by two deep sutures, the wound being dressed with boracic acid and gauze, held in position by a T bandage. The patient felt well after rallying from the anæsthetic, had very little pain, and passed a very comfortable night. His temperature rose to 101 on the 29th. Felt no pain in the bladder, and he thinks some urine passed per urethra on the 30th. The tubes were removed on the first of May. Urine positively passed per urethra on the 4th, but it was not until the 9th that he urinated at will. On the 3rd he was placed on a lounge all day, and seemed greatly rested by his change of position; on the 10th he sat in a chair and ate his dinner; on the 14th he walked round the block, retained the urine for two hours. On the 16th, or 19 days after the operation, he left for Kingston, the wound not quite healed, but yet he had full control over the bladder. He was somewhat used up by the journey, which of necessity was made so soon, but no ill effects resulted. During the next two or three weeks he gained slowly. He went to the country the first of June, and gained forty-one pounds by the first of July.

CASE NO. 2.—Mrs. G.M., æt. 33, married four months. Previous family history perfect.

Present illness: For the past six months she had noticed that micturition was more than usually frequent at the menstrual period, yet not distressingly so. She only referred to it on being questioned. Immediately after marriage she had excessive pain and great frequency of urination, which lasted about a month. These symptoms abated considerably during the day, but increased at night. I first saw her on the 23rd of December, 1891. Ordered a placebo without effect, she objecting to an examination. No improvement being noticed in four or five days, rather the reverse, she acquiesced, and I examined the interior of the bladder with the crystoscope. On first examining the bladder by pressure between the finger in the vagina and the hand placed on the abdominal wall, great pain was complained of, the bladder contracted

spasmodically. On the insertion of the soft catheter to inject fluid to distend the organ so much pain was caused that I made this examination under chloroform, Dr. Adam H. Wright assisting. A small cluster of tubercles, yellowish and very distinct, was revealed on the base of the organ, in the inter-urethral line. A tumor was also detected in the left upper and anterior wall of the bladder, of dark-reddish color, apparently smooth, and gave us the idea that its size would be that of a pigeon's egg. The other parts of the bladder were healthy, the vessels and the trabeculæ were easily distinguished. A second cystoscopic examination was made without anæsthetic and the same conditions found, but the pain of this examination set up spasmodic contraction in a few minutes, so that it had to be discontinued. I decided to operate, and chose the suprapubic route on account of the special advantage offered.

On January 24th, 1892, assisted by Drs. Adam H. Wright and W. Lehmann, I operated. In the abdominal incision no vessels required to be ligated; the bladder was found low down in wound, and was opened on a sound passed per urethram and pressed well up; no rectal bag was here used. The bladder wound was enlarged by the fingers to sufficient size to admit a speculum. No tumor was found, which rather chagrined me, but the tubercles were present, and another cluster seen and felt on the fundus. Bruce Clarke's speculum was the one used, and an exceedingly perfect view was obtained of the whole bladder. The mouth of the left ureter was congested and protruded slightly. The tubercles were thoroughly cauterized by the Paquelin, double drainage tubes inserted, and the abdominal wound drawn together at the upper part by two deep sutures. The wound was dressed with boracic acid and gauze, retained by a T bandage. The temperature never rose above 99°, pulse never higher than 84; drainage tube removed on the 26th. A few drops of urine passed per urethram on the 29th, and about two ounces passed on the 3rd February; on the 11th she sat up and ate her dinner. The urine had continued to come from the wound until the 12th of February, 19 days after the operation, when it ceased to do so and was passed in the natural manner. She was downstairs on the 13th, and was out on the 14th for a short walk.

CASE No. 3.—Mr. P., æt. 72, plasterer, and working up to within three months from the time I first saw him.

Family history: Good; no previous illness until five years ago, when he first complained of lancinating pain in the back, which gradually became more severe. Periods of exacerbation in the pain became frequent, and he passed several small calculi. He says that he has passed, during five years, as many as fifteen or twenty, two of which I here show you. His bladder has never been sounded, the case having been treated by solvents entirely.

History of present illness: I first saw the patient on the 12th of March, this year. Found him in bed, apparently well, complaining of nothing except spasmodic pains in the bladder and severe pains on micturition, which were increased and intensified on assuming the erect posture. When in recumbent position, the periods between the act varied from two to three hours; while in standing the periods would be from three-quarters of an hour to an hour and a quarter. The urine was clear and straw-colored, acid, and contained no sediment. On the 13th I examined the bladder with Thompson's searcher, and immediately came against a stone with the beak of the instrument. I found the patient had misunderstood my question as to how long since he had passed urine, and instead of the bladder being full, it was quite empty.

A large uric acid stone: The composition of the large calculi passed and the apparent size of the stone in the bladder led me to advise an immediate suprapubic operation. The urine was examined four times between the 12th and the 16th; always found to be clear. Specific gravity varied from 1020 to 1024, always acid; contained no albumen nor sediment, nor were there any casts. On one occasion Dr. John Caven (who also examined the urine for me) thought there was a slight trace of albumen, but it was very slight. On the 16th of March, assisted by Drs. W. H. B. Aikins, W. Lehmann, Mr. C. Carter, medical student, being present, I did the high operation. After the patient was anæsthetized the bladder was filled with six ounces of boracic acid solution, the rectal bag introduced and distended with twelve ounces of water. The distension set up a severe

straining, similar to the case of No. 1, but the bag did not burst, however, and the straining subsided in a few moments. The patient had micturated just before being anæsthetized, and no residual urine was found in the bladder. In the abdominal incision two small vessels required to be twisted, the peritoneum did not present itself, and the bladder was seen bulging slightly at the bottom of the wound; this was hooked up and a nick made into it to admit the finger tip. A large stone was immediately felt; the bladder wound was enlarged by the fingers and two stones were removed, the larger one almost a complete sphere 5¼ inches in circumference, mulberry, weighing slightly over two ounces; the other almond-shaped, weighing eighteen grains. The double drainage tubes were inserted, two stitches were put through the abdominal wound, and it was dressed with boracic acid and gauze. 17th: The pulse, since the operation, has not exceeded 82, nor has the temperature been above normal; somewhat colicy pains in the bowels, possibly due to the calomel administered on the night previous to the operation. From the 17th to the 23rd nothing to note in particular; on the 23rd the first urine passed by the penis, pain insignificant. On the 24th he was on the lounge, and on the 8th of April he was downstairs, the wound healed, and from that day on he was out walking.

Subsequent history: On the 3rd of May he complained of pain in his left lumbar region, tenderness extending into the groin, œdema of the whole left side, extending from the hip almost to the eighth rib, well over towards the umbilicus. The tenderness was excessive, and most prominent over the region of the kidney; feet swollen; temperature 100°; pulse feeble and rapid; several slight chills. The urine was scant and contained large quantities of urates; his tongue became dry and parched, his temperature ran up to 101½°; pulse very flighty. He died on the 11th of May, eight days after attack. I show the specimen there discovered. All the organs of the body were healthy with the exception of the left kidney, which contained a large calculus; the perinephritic fat was in a state of acute inflammation, etc. The operation is seen to be in no way responsible for the patient's death.

In Case No. 1 you will remember that he had what was called a "typhoidal" attack in October, 1890, with a relapse in December. Now, I do not suppose that these attacks were typhoid fever at all, but were pyæmic, and that the cause was an accumulation and retention of pus in the sac in the bladder. I show you here a specimen of a bladder that has in its walls one large and many smaller sacs. (*See cut.*) I have two other specimens of a similar kind, one of them occurring in the female. In none of these cases was cause found for the development of the sacs. Suppose with me for a moment that at the time of his first symptoms in 1885, or subsequently, a small calculus was deposited and retained in one of these pockets, and that even from its slight

weight continually increasing the sac enlarged, but the mouth remained about the same size, small enough to retain the accumulations. We can easily account for the symptoms that stimulated the typhoid condition, and also see clearly from whence came the great discharge of ropy mucus and pus that he refers to as having occurrred in February, 1891. It will also explain why the surgeons had been unable to find the stone when it was searched for. Dr. Henderson was of the opinion from the great emaciation, night sweats, and other symptoms, that it was a case of tubercular ulceration of the bladder. Many of the symptoms certainly looked that way, and the chances of touching the stone so sacculated were small, if not at that time absolutely impossible.

In Case No. 2, you will see that with the cystoscope a tumor was diagnosed which the subsequent operation failed to reveal. The blame for this cannot be laid on the cystoscope, but rather upon the operator, and yet there undoubtedly was something tumor-like protruding into the bladder at each of the two examinations. I was at a loss just how to explain this circumstance until recently, when my friend, Dr. L. Bolton Bangs, of New York, in a paper on "Some of the difficulties in the use of the cystoscope," read before the Surgical Section of the New York Academy of Medicine in November, 1891, referred to a similar experience of his own. His diagnosis of bladder tumor was confirmed by Dr. Willy Meyer, another experienced operator with the instrument. He says: "Upon the superior and lateral wall of the bladder on its left side is seen projecting into the viscus a conical-shaped body, sessile, irregular in outline, and of deeper hue than the surrounding mucous membrane." While after the operation he says: "At the place where the tumor was supposed to have been seen prior to the operation, there was nothing but the thickened, softened, and hyperæmic mucous membrane as seen elsewhere within the viscus." His explanation, and with it I entirely agree, is that it was a fold of the anterior bladder wall. When we think how the mucous membrane of the bladder folds up when the organ is empty, it will not be difficult to see how this fold may have been projecting still into the viscus. It behooves us, therefore, to be more careful and more thorough in our examinations. In his case, as in mine, there was other trouble present, which the operation relieved, and was sufficient cause to justify the operation; the operator would have felt humiliated on not finding that for which he was looking and had diagnosed as existing.

In Case No. 3, the size of the calculus is proof that a longer time than five years must have elapsed since the nucleus of the stone was formed, yet no symptoms were evidenced until five years ago. It is another striking evidence that stone may exist without symptoms, or at any rate symptoms of any severity. Since reading this paper another case has been sent me in which no symptoms of stone existed excepting when from cold or other causes a cystitis was produced. Two years ago it was found, and gave him no trouble until quite recently, when from a cold he developed an acute cystitis. The specimen of the kidney with so large a stone (over one-half inch in diameter) and symptoms so recent is peculiar. When I made the *post mortem* and found the large mass of hardness surrounding the kidney I felt sure that it was cancerous, but the explanation is clear on dissection, and seeing where a perforation exists with infiltration into the cellular fat and subsequent inflammation. I do not propose to enter into the discussion of suprapubic versus perineal lithotomy. There are cases in which each is the better, but I am of the opinion that the high operation is the one that should be resorted to by any operator who is not thoroughly experienced in the lateral. It is the operation for the surgeon who has not seen or performed the lateral several times. There is no danger of wounding any part or organ that surgical cleanliness and care cannot immediately rectify; while in the lateral large vessels are in the immediate vicinity; the spermatic vessels and other parts are in danger, to injure which is to leave a permanent disability on the patient. The best direction for the abdominal wound and its treatment are yet unsettled questions. I believe that the straight cut with a partial transverse division of the rectus is the one that will give the best after results; except in the case of an exceedingly large and fat abdomen, when the transverse may be resorted to.

The wound of the bladder: Whether to leave it open or stitch it up has been brought before the profession of Ontario at the meeting of the Ontario Medical Association in June last by Dr. Groves, of Fergus. I was unable to hear the paper, but from what the doctor told me I believe he advocates closing the bladder and draining through the urethra. I do not agree with that. In the first place, the constant passing of instruments is injurious to the urethra and irritating to the neck of the bladder, and liable to set up an inflammatory process which we need only to think of to dread. Sir Joseph Lister drained through an opening made from within outward in the perineum. In the second place, the bladder wound must of necessity be drawn absolutely together in every part, or there will be infiltration. Should the drainage be in any way imperfect through the urethra, I prefer to leave the

wound open, or, what may be offered as a compromise, to stitch the bladder walls partially together, leaving opening enough to allow the drainage tubes to pass out. The abdominal wound I do not expect to heal by first intention, but I do find that by using the two sutures healing is assisted by preventing the wound from gaping. The upper part of the wound in two of the cases, though, did heal by first intention. The patients can be allowed perfect freedom of movement on the back or sides immediately after the operation.

That the rectal bag has been of great advantage in the high operation no one can help admitting, but its use is not without danger. Rupture of the rectum has been reported many times, and not from over-distension with large quantities of fluid, but from the straining produced, putting the distended bowel at a great disadvantage, and a weak one in imminent danger of rupture. Foreign bodies in the rectum, or interference with the rectum, even when the patient is well under an anæsthetic, especially chloroform, are very often followed by straining. *The position is important;* that of Trendelenburg does away with the use of the rectal bag, and allows the bladder to be more accessible to the operator. It also allows the peritoneum to draw away, and thus reduces to a minimum one of the great bugbears of the operator. Should the peritoneum, however, be any accident by opened, close it as in any abdominal section, and all should be well.

In conclusion, gentlemen, I apologize for the length of the paper; but if it will induce a discussion that will resuit in throwing additional light on these interesting and common cases, I shall feel that the time has not been idly spent.

44 QUEEN STREET EAST, TORONTO.

SUBSTITUTE FOR OPIATES.—Dr. Portier (*La Semaine Médicale*) recommends the following as a substitute for the preparations of opium:

℞	Hydrochlorate of cocaine . .	cgms. 50
	Phenacetin	gms. 1.5
	Exalgine	cgms. 50
	Salicylic acid	gm. 1.

Divide into ten powders. Take one powder every two or three hours until the pain ceases. —*Med. and Surg. Reporter.*

SYNOPSIS OF THE PROCEEDINGS OF THE SIXTH ANNUAL MEETING OF THE AMERICAN ORTHOPÆDIC ASSOCIATION.

BY B. E. M'KENZIE, B.A., M.D.

The association met at the New York Academy of Medicine, Sept. 20, 21, and 22, 1891, Dr. Benjamin Lee, of Philadelphia, president, in the chair. After the address of the president, a lengthy programme of nearly forty papers was taken up. Necessarily, many papers were read simply by title, and will appear in the transactions.

The hip-joint received a large share of attention, there being presented a paper by Dr. A. M. Phelps, of New York: "Experiments Demonstrating the Etiology of the various Deformities in Hip-joint Disease." A large number of dissections had been made and were shown. It was claimed (1) that in early hip disease *flexion* and *adduction* occur because the fibres of the joint capsule run in a direction downward and inward, so that in the position assumed the fibres are relaxed, and the inflamed joint is thus put at ease; (2) that when flexion to the extent of 20 degrees has occurred the external rotators, represented by the gemelli and obturator group and the glutens maximus, do not continue to act as external rotators, but as adductors, and that the anterior portions of the glutei and the tensor vaginæ femoris now act as flexors and internal rotators; (3) there being now but little opposition to the adductors and internal rotators, the limb assumes the position of adduction and flexion in which it is found in the advanced stage of hip disease.

There was but little exception taken to the propositions laid down by Dr. Phelps, and it was uniformly conceded that the paper was a most valuable contribution to the anatomy and surgery of the hip-joint.

Other contributions on this subject were: "Adduction Following Fracture of the Neck of the Thigh Bone," Dr. Hodgens, St. Louis; and "Report of a Case of Spontaneous Dislocation of the Hip-joint," Dr. B. E. McKenzie, Toronto. A woman, 21 years of age, in rather poor general health after the birth of her first child, suffered from subacute rheumatism, and was confined to bed two months. During that time

she sat up much, keeping the right knee drawn up nearly to the chin and the hands clasped over it. Three months after her first confinement to bed, the examination revealed a dislocation of the head of the femur upon the dorsum ilii. The dislocation was easily reduced under chloroform, and kept in position by the wearing of a Thomas hip-splint. A year and a half afterwards, there is found to be anchylosis, no shortening or other deformity, and no atrophy.

A paper presented by Dr. Royal Whitman, of New York, proved to be one of great interest: "Observations on the Ultimate Deformity of Pott's Disease." Dr. Whitman showed a case in which he is employing the Taylor spinal brace with modifications. Proceeding upon the proposition that in the normal erect attitude a perpendicular line passing through the tarsus should pass through the acetabulum and the mastoid process, he aims at keeping the spine from curving forward (when disease is in the middle spinal region) in the dorso-lumbar and high dorsal and cervical regions by the employment of pads in front of the points of the shoulders, sufficiently wide to prevent the arms from being raised up in front; by two pads which keep the shoulder-blades closely in contact with the posterior part of the thorax; and by a chin piece, not intended to carry the weight of the head, but to throw it sufficiently backward to bring the mastoid processes into the perpendicular line passing through the acetabula. Several of the members had seen this case on different occasions during the last year, and claimed that Dr. Whitman was succeeding in a very unusual degree in preventing deformity.

Dr. Nicholas Grattan, of Cork, Ireland, was present, read a paper on "Osteoclasia, and demonstrated the use of his osteoclast by operating upon three cases of knock-knee and two of bow-legs. To those who admit there is a place for osteoclasia, Dr. Grattan's instrument must commend itself as the most simple, safe, and certain of those given to the profession. The general feeling, however, was that the cases must be few when osteoclasis should be preferred to osteotomy.

Two unusual cases of knee dislocation were reported: "Lateral Dislocation at the Knee-joint, Due to Local Disease or Paralysis," Dr. T. Halsted Meyers, New York; "A Case of Complete Lateral Dislocation at the Knee, Due to Traumatism," Dr. McKenzie, Toronto.

Dr. A. J. Steele, of St. Louis, presented a paper which covered much ground, and called out a lengthy discussion: "Plaster of Paris in Orthopædics." For spinal cases Dr. Steele preferred leather, wet, and applied so as to fit accurately, and then heated to a temperature of 210° Fahrenheit. Dr. Phelps claimed that there was no fixation equal to that to be obtained by the proper use of plaster of Paris. There are many who use it, but do not get the good results that might be obtained because they do not know how to employ it. As a retentive dressing in the treatment of club-foot, Drs. Steele, Phelps, McKenzie, Gilette, and others considered it superior to all other means. Drs. Ketch, Judson, Taylor, and Shaffer prefer to use the various forms of steel club-foot shoes, on the ground that they are more readily removed so as to employ massage to the foot.

Dr. Bradford, of Boston, presented a most exhaustive and lucid statement of the question of the "Treatment of Resistant Club-foot." At all ages there are those where, under an anæsthetic, the foot may be replaced in the corrected position by force alone, without any cutting, employed simply by the hand or by various forms of leverage. The next class of cases is found where there are resisting tendons or bands of fascia, which may be cut subcutaneously before torsion is applied. Next, there comes a class of cases where it is necessary to make an open incision in order to divide the resisting structures more completely, and because the skin is too short to permit correction to be made. Then, in some cases correction to be made even when all the resisting soft structures have been cut. Under these circumstances, Dr. Bradford prefers to remove a cuneiform section from the outer border of the os calcis. Various bone operations, however, have been recommended. Dr. Morton had presented some good cases operated on by removal of the astragalus, and Dr. Bradford had followed his lead, but had concluded that its removal was not justifiable except as a last resort. The cuneiform section taken from the outside of the foot should never be done until other methods have been tried, and last of all should the astragalus be removed.

Dr. Phelps followed, reviewing the ground most thoroughly, and claiming that there was nothing in Dr. Bradford's paper which had not been taught and published by him (Dr. Phelps). Dr. Grattan and Dr. McKenzie pointed out that there were cases that could not be restored by any of the foregoing methods; cases where, in spite of the fact that the foot *per se* was fully restored to normal shape, yet the patient toed inward, there being evidently a twist in the limb in some part. Dr. L. A. Sayre, Dr. Ketch, and Dr. Vance recommended carrying a brace upward to the thigh, and even to the body, in order to turn the foot outward. Dr. McKenzie, in reply, claimed that such treatment must be ineffectual, inasmuch as apparatus applied about the thigh would turn inward as the foot turned, and if applied about the pelvis would turn the foot outward by causing external rotation at the hip, and would not make correction where the deformity existed. Dr. Grattan recommended osteoclasis of the tibia and fibula, and then placing the foot in the position desired. Dr. Phelps recommended an apparatus devised by Beely, of Berlin, for children, by which the leg was kept flexed upon the thigh, so that the tendency of the foot to turn inward could not rotate the thigh portion of the appliance, and in older persons osteotomy of any part in which the twist was found most marked.

Dr. McKenzie took exception to Dr. Phelps' method of operation, in which he makes his first step the cutting of the Achilles tendon, on the ground that it is now much more difficult to correct the varus—always the difficult thing to accomplish successfully. He was sustained in this criticism by Dr. Steele, of St. Louis, and Dr. Goldthwaite, of Boston. Dr. Phelps assigned as his reason for so proceeding because in one case in every ten there was a very strong, deep ligament connecting the posterior part of the tibia to the os calcis; and as this could not be cut without great danger of wounding the posterior tibial artery, it had to be ruptured, and must be done while the plantar surface of the foot remains intact.

Dr. Moore, of Minneapolis, presented "A Report of Six cases of Incision at the Knee-joint," recommending a careful selection of suitable cases and the high incision—four inches above the patella. Dr. Griffiths, of Kansas, criticized some of the cases as having been too radical, an arthrectomy being the operation that was indicated.

Dr. Phelps said that arthrectomy had been introduced with a hope of curing the disease, and at the same time getting a movable joint. The best surgeons were now agreed that it was better never to try to get movement after operation at the knee, and when operation in the adult was indicated excision should be performed after Fenwick's method, rounding the femoral segment and hollowing out the tibial so as to get accurate coaptation, avoiding the insertion of nails as a means of securing fixation. Under ten years, excision should not be performed. If operation is demanded, better amputate.

Dr. Steele, of St. Louis, was elected president, and Dr. Ridlon, of Chicago, secretary. The association will meet next year in St. Louis.

Selections.

ON THE TREATMENT OF CHOREA BY EXALGINE.

BY DR. MONCORVO,

Corresponding Member of the Academy of Medicine of Paris.

In 1888 and 1889 I published some remarkable results obtained by the use of antipyrin in chorea, but in 1890 I resolved to make use of exalgine, a new agent, then recently introduced by MM. Dujardin-Beaumetz and Bardet.

On September 11, 1890, I admitted a girl of eight years affected with chorea, intense and generalized, who was submitted entirely to treatment of exalgine, administered in doses of three grains at first, afterwards increased to four and one-half grains. It was not without some astonishment on my own part and that of my assistants that we could establish, in the course of eighteen days of treatment, the cessation of all the choreic manifestations; the permanency of the cure has since been established by observation.

In this case, not to interrupt the treatment suddenly, I continued the exalgine for eleven days longer in daily doses of two grains, so that the total amount of exalgine taken was 96 grains. Had I used antipyrin in this case I would have given at least 45 grains daily; the activity of the

exalgine appears to have been, therefore, about fourteen times as great as that of the former.

The second case related to a girl of eight years who entered my service September 28, 1891. Both parents hysterical and nervous; father had rheumatism seven years before. Of the eight children of the family besides the little girl, none had had any nervous trouble. The patient had whooping-cough at 18 months; rubeola at about two and a half years; pneumonia at the age of four. Has always been delicate and thin. Since the age of six years she has always become very much excited at the least reproof.

A month ago her mother noted that the limbs of the left side were agitated in an irregular manner, and at the same time that she staggered when she walked. These conditions augmented progressively and the fibrillary contractions of the tongue rendered her words almost unintelligible.

When I first examined the girl she was unable to hold herself upright without swaying; she executed every instant movements of torsion of the trunk; her shoulders, especially the left, were elevated and lowered along with the muscles of the limbs; those of the left side particularly were frequently agitated with choreic contractions of varying intensity; the muscles of her face, also, were subject to arythmic contractions. Mental state evidently enfeebled and she appeared indifferent to all that occurred around her; she took no interest in games proper for a child of her age.

In October a treatment by exalgine was begun in daily doses of three grains. On the 12th there was sensible improvement in the mental state and in the clearness of her speech. The dose of exalgine was raised to 4½ grains daily. On the 15th the patient was evidently more cheerful and could talk much better. The muscles of her face has ceased contracting; she walked with less dragging. The dose of exalgine was increased to six grains a day. The improvement was uninterrupted, and by the 22nd she could use her hands in eating, speaking in a loud voice, and there were only some scarcely perceptible movements of the limbs. The drug was now given in two doses of 3¾ grs. each, daily, until the 31st, when it was given in single doses of 4½ grs. twice a day until Nov. 5, when it was suspended for three days. From the 8th to the 26th the same dose was continued with constant and regular improvement in the condition. At this time the iodide of iron was substituted. This patient when last seen was perfectly free from choreic symptoms, nor had there been any signs of recurrence.

The total duration of treatment was thirty days, the total amount of exalgine taken was 205 grains. Had I used antipyrin I would have given twelve times as much, or about five ounces.

In Conclusion.—Exalgine seems destined to render excellent service in the treatment of Sydenham's chorea, at least in young patients who are the most disposed to this complaint. In my practice it has shown itself of great efficacy in the choretic convulsions as well as in the other manifestations which accompany them, such as the insomnia, psychic troubles, muscular feebleness, digestive disorders, etc., and I believe that in many other analogous cases it will be equally beneficial. I regret that the rarity of the complaint in Brazil has prevented me from making as extensive a study of the drug as I desired.—*Bull. Gen. de Therap.—Medical Mirror.*

DEATH DURING THE FIRST STAGE OF CHLOROFORM-NARCOSIS.—The following report of a case of death under chloroform is presented because at the time of its occurrence its imperfect publication in the newspapers elicited a certain degree of interest, and also for its statistical value in emphasizing the danger of chloroform as an anæsthetic. On July 12, 1892, Mason Boggs, an Englishman by birth, and a "burner-off" by trade, applied to have his left shoulder set. His appearance was that of a young, well-built laborer. Three weeks previously the same shoulder had been dislocated, and, according to the patient's statement, the physicians in attendance had "some considerable trouble" in reducing the dislocation. The character of the trouble was not asked. His pulse was strong and regular, slightly quickened, and his respirations were normal. Having once taken ether, he objected to it on the ground that it made him sick. After an unsuccessful attempt to set the shoulder without anæsthesia, I determined to administer chloroform to the point of slight relaxation. A few drops were

poured on a handkerchief and held two inches from his nostrils, when immediately a choking sensation, like that produced by ether, was induced. The handkerchief was then withdrawn. After a few moments a second attempt was made, when the patient went into a convulsion and became cyanotic. The anæsthesia was withdrawn at once, and artificial respiration and stimulants were resorted to. At first the man appeared to react, his color was restored, and his pulse became full. He then took several deep and regular respirations, turned on his back, and died. In this case no actual narcosis was produced, and the quantity of the anæsthetic used was extremely small. By actual measurement only one and one-half drams of chloroform had been used, of which a large proportion had evaporated while the handkerchief was removed from the nostrils of the patient. The autopsy, made by Dr. Sidebotham, and which I was permitted to attend by the courtesy of the coroner, revealed the following condition: The lungs were normal. The heart was dilated, and its muscular walls hypertrophied and softened. The liver was slightly hardened. The spleen was very large and soft. The stomach contained no food, but was filled with catarrhal mucus, and the mucous membrane was much ingested and swollen. The kidneys were enlarged, the left in the greater degree; the capsules were easily removed, and the connective tissue was increased. On section, the kidneys presented the appearance described by the late Dr. Formad as the "cyanotic" kidney. From the employer of the patient I subsequently learned that the man was of very dissipated habits, and especially so in an "alcoholic" direction. The apparent vigor of the man, the small quantity of chloroform consumed, and the early appearance and fatality of the convulsive stage of narcosis unfortunately emphasize the statement made by Hare, that "In athletes and drunkards there is a first stage of chloroform-narcosis, characterized by struggling, which it is dangerous to overcome with the anæsthetic."—*F. W. Thomas, M.D., in Med. News.*

TAKING AN ADVERTISER AT HIS WORD.—A decision is reported by the London *Times* from the Court of Queen's Bench which should overwhelm the souls of many astute Americans with remorse at the thought of neglected opportunities, and which may well transfer the palm in the art of making money from New to Old England. It seems a certain company which trades in a commodity called the "carbolic smoke-ball" had offered, as an inducement to the public to patronize their shop, a guarantee of $500 that any person using their nostrum should enjoy thereafter immunity from influenza. A woman in London took the advertisers at their word, bought and used their prophylactic, and thereafter suffered, like many of her unprotected neighbors, from an attack of influenza. The promise of immunity having thus been falsified, the lady brought an action to enforce the alternative promise of a solatium of $500, and was met with a defence which put forward every possible ground of technical objection to the plaintiff's claim. The defendant pleaded that there was no contract; that if there was, it was not stamped and could not be sued on; that it was a wagering contract, and therefore void; and that it was a contract of insurance which was prohibited by statute. But the court held that there was a contract, for there was a consideration received by the company in the price of the smoke-ball, and the court added that the daily use of the article was sufficient to support the promise of remuneration. The defendant had not only issued the advertisement, but had stated, "as showing their sincerity in the matter," that they had deposited £1,000 in bank, which the court held must be taken as meaning that they were prepared to pay. The contract was also held not to require a stamp, nor to be a wagering contract, nor such an insurance contract as was regulated by statute. People who are silly enough, *The Lancet* says, in commenting on this case, to adopt a medicine simply because a tradesman makes extravagant promises may thank themselves chiefly for any disappointment that ensues. Still for this folly, which is only foolish and nothing worse, it is possible to feel sympathy when the disappointment comes. It is a pleasant alternative to learn that the dupe has been able, as in the present instance, to enforce a sharp penalty, and that the process of reaping a harvest from the simplicity of one's neighbors is attended with dangers of miscarriage which must materially diminish its attractiveness in the

eyes of those people who supply the popular demand for quack medicines.—*Med. Record.*

THE RELATIONS OF PELVIC DISEASE TO PSYCHICAL DISTURBANCES IN WOMAN. — Dr. George H. Rohé,* of Catonsville, Md., read a paper upon the above subject at a meeting of the American Association of Obstetricians and Gynecologists at St. Louis, Mo., Sept. 20th, 1892. The author pointed out the frequency with which bodily conditions influenced mental states. Thus a torpid condition of the intestines, Bright's disease, putrefactive processes in the intestinal canal, etc., might give rise to melancholia and other disorders of the mental functions. It is not irrational to suppose, likewise, that diseases of the female sexual apparatus would have a not inconsiderable influence in the production or perpetuation of mental disorders. As a contribution to the knowledge of the subject, the following report was submitted: In a hospital containing 200 insane women, 35 were subjected to vaginal examination, and 26 found with evidences of pelvic diseases. In 18 of these the uterine appendages were removed, with the following results: Sixteen recovered from the operation and two died. Of the 16 recovered, 3 have been discharged from the hospital completely restored, both physically and mentally. In 10 considerable improvement followed the operation in both physical and mental conditions, and in 3 the operation was of too recent a date to allow any definite expression of opinion. The mental disorder present in the 18 cases was melancholia in 6 cases, simple mania in 1, puerperal mania in 4, hysterical mania in 1, periodic mania in 2, hystero-epilepsy with mania in 1, and epilepsy with mania in 3. The author, basing his opinion upon his experience, concludes as follows: "The facts recorded demonstrate, first, that there is a fruitful field for gynecological work among insane women; secondly, that this work is as practicable and can be pursued with as much success in an insane hospital as elsewhere; and, thirdly, that the results obtained not only encourage us to continue in the work, but require us, in the name of science and humanity, to give to an insane woman the same chance of relief from disease of the ovaries and uterus that a sane woman has."

*See report of cases by Dr. Rohé in proceedings of Clinical Society of Maryland (page 479 in this issue).

FATAL ACCIDENTAL HEMORRHAGE. — Maygrier (*Arch. de Tocol.*, July, 1892) exhibited before the Obstetrical Society of Paris a placenta and uterus from a case under his observation. A woman close upon term was sitting over a *bidet* to cleanse the vulvar region, when flooding set in suddenly. Profound syncope followed, and the patient died speedily, all attempts to check the hemorrhage proving futile. The child was lost. Naturally, a low attachment of the placenta was suspected; but at the necropsy it was found to be applied to the posterior part of the uterine wall, not low down. The hemorrhage had been caused by a very limited detachment of the placenta. Under its lower border a large clot was detected. Maygrier was not certain about the precise cause of the accident. The position of the woman over the *bidet* might have caused the detachment. Guéniot remarked that these detachments of placenta not attached to the cervix were frequent in workwomen, but he had never seen them in private. The clot lay under the placenta, which might only be separated from the uterus to a limited extent; the uterine aspect of the placenta was capped by the clot. In some cases no blood issued from the vagina. In private Guéniot had observed cases of accidental hemorrhage at the seventh month, without any ascertainable cause. After delivery, apoplexy of the placenta, and not faulty insertion or detachment, was discovered. In two of these cases syphilis existed. Pajot insisted that plugging was justifiable in these cases; for if the membranes were simply ruptured, the patient might die before the end of labor. On the other hand, when the uterus was empty ergot might be given. All clots must be removed from the uterine cavity before the administration of that drug. By following the rule, "Never plug unless the uterus be full or small, and never give ergot till it is empty," these cases of accidental hemorrhage might be safely managed.—*British Medical Journal.*

OPERATIVE TREATMENT OF POTT'S DISEASE. —(Contribution à la chirurgie rachidienne du

drainage vertébrale dans le mal de Pott. *Revue de Chirurgie*, April, 1892, p. 275.) Vincent advises the drainage of abscesses and the removal of diseased bone in Pott's disease of the vertebræ. The drainage tube is to be passed in U-form, either entirely in front of the vertebræ or directly through the bodies in front of the spinal canal. The operation is carried out by a vertical incision on each side of the spinal muscles, joined by two others drawn horizontally outward, converting them into T-incisions. One or more ribs are resected to give access to the front of the spine, and then a blunt, curved probe is passed in front of the vertebræ from one side to the other, and the drain drawn through under its guidance; or a curette is made to bore through the body of the affected vertebra obliquely forward and inward until it strikes an instrument held under the periosteum on the other side. The latter method is employed where the body of the vertebra is broken down and a curved drainage tube is drawn directly through the bone. Two cases are given in which the operations were performed with success.—*International Medical Magazine.*

EARLY DIAGNOSIS OF PREGNANCY.—Dickinson (*New York Journal of Gynecology and Obstetrics*) states that the presence or absence of pregnancy may be determined in favorable cases by bimanual examination between the second and sixth week after coitus, or between the third and eighth week after the beginning of the last menstruation. The most constant and valuable sign is bulging of the walls of the body of the uterus, which is usually found by the twenty-eighth day after coitus, but may be present by the sixteenth. In occurs most frequently on the anterior face, but may appear on both. In retroversion it is found posteriorly, in some cases laterally. Elasticity or resiliency of the body of the uterus is more easily detected than the bulging, but is not so frequent. Most frequently it appears by the thirteenth day after fruitful coitus, but may be detected on the sixteenth. Compressibility of the lower uterine segment, Hegar's sign, is still less constant. The writer observed it in sixty-six per cent. of his cases. It is often indistinct until the thirteenth to fifteenth day after fecundation, although it may be well defined by the twenty-fourth day. In the relaxed condition a transverse fold on the anterior uterine wall is usually distinctly felt. This sign is of very high value. Between the second and sixth week, the uterus shows signs of intermittent contraction.—*University Medical Magazine.*

TWICE TOO MANY DOCTORS IN THE UNITED STATES.—Up to the present time the number of medical colleges has increased out of all proportion to the increase of population. Of 130 schools, less than a dozen are endowed. The number of practitioners is greatly in excess of the legitimate demands of the people. We are reliably informed that in the decade ending with 1890 the colleges of the United States matriculated 115,355 students, and graduated 39,996. This is an average of 4,000 yearly—in my opinion, more than twice as many as the requirements of the people demand. As a final argument in behalf of adequate medical legislation, I beg to submit the following statistics, based upon the proportion of physicians to the inhabitants in a few of the European countries:

Ratio of Physicians to Population.

Sweden	1 to 7,000
Italy	1 to 3,500
Germany	1 to 3,000
Austria-Hungary	1 to 2,400
France	1 to 2,000
United States	1 to 600

—*Dr. Millard, in Medical News.*

HEART FAILURE as a cause of death, to use a cant expression, has become a "chestnut." We read in the New York *Medical Examiner:* The clerk of the Board of Health of Syracuse, says *Insurance*, recently refused to issue a burial permit on the certificate of the physician attending the deceased, which simply gave "heart failure" as the cause of death. The physician, when informed by the undertaker of the clerk's refusal, declined to give any more definite account of the case for the benefit of the board than was contained in the words heart disease. This resulted in the board, at its next meeting, adopting a resolution to the effect that physicians in the future will have to specify the direct cause of depth, and that "heart failure," "asthenia," and such generalities, will not answer the purpose. This is sensible. To say

that a person died from "heart failure" is to say no more than that the person died because his or her heart stopped beating, and to assign "asthenia" as the cause of death is simply to affirm that the person died by reason of inability to live.—*Medical Review.*

ANTISEPSIS IN TYPHOID.—Among forty-four cases of typhoid fever one-half were treated antiseptically, the other expectantly, by Dr. R. Caton *(British Medical Journal).* Here is the result:

	Deaths.	Days of fever.	Days of relapse.	Days in hospital.
Expectant treatment..	4	37·9	9	52
Intestinal antisepsis..	..	25·3	1.8	46

Dr. Calvin says: "Watching these cases from day to day, I have been much impressed by the apparent good effects of the intestinal antiseptic treatment. It is obviously a rational method. There is considerable evidence that such bodies as chlorine, creasote, naphthalin, iodine, iodoform, and alpha- and beta-naphthol are destructive to septic and poisonous compounds and organisms found in the intestinal canal. It is, therefore, antecedently probable that they would be of service."—*Med. Record.*

INDECISION.—Indecision is a very grave defect in the life of any person, but it is especially so in the life of a doctor. Prompt decision after the facts have all been considered is imperative for any satisfactory career. The causes of indecision are numerous, and its varieties equally so. In some it springs from knowledge so extensive as to impress its possessor with the dangers that may follow a certain line of action, and yet so limited as to deprive its possessor of the confidence that he has all the knowledge of practical value. He knows too much to possess the confidence of the ignorant, and too little to secure that of the wise. Hence it is impossible for him to act with decision. Another class of persons are unable by organization to reject the unessential and rapidly mass the essential as a basis of action. One individual of the writer's acquaintance could speak and write with facility seven languages; all the sciences were within his grasp; the arts were his familiar friends; every branch of medicine found a congenial home in his wonderful brain; he was master of the ways of society, but he was unable to select from this mass of facts the proper course of management of a case of measles. He could not decide upon anything because of the manifold things that had been prescribed in the books for this trouble.—*American Lancet.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

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TORONTO, OCTOBER 15, 1892.

THE STANDARD IN PRACTICAL ANATOMY.

The Toronto *Mail* of Oct. 5 contains the following item from its Kingston correspondent:

There is considerable feeling here over the action of the Medical Council in lowering the standard in practical anatomy required by the students, and at a meeting of the medical faculty of Queen's University Dr. Sullivan moved "that this faculty respectfully requests the council to reconsider the matter, as the change seems most injurious to the interests of medical education; and that a copy of this resolution be sent to Dr. Moore, representative of the University Council on the Medical Council. The Ontario Council has determined that students need dissect only one-half a body, claiming that the two sides are so much alike as to render the other other half unnecessary. The university faculty, however, hold that the whole body should be gone over, so as thoroughly to impress the anatomy on the student's mind, and that if any change were made it should have been in the direction of increase, as anatomy is the basis of all medical science."

We take it that the action of the council with regard to this matter is not correctly interpreted by the medical faculty of Queen's University.

The change referred to was made in the interests of medical education, and for the sole purpose of *raising* the standard of teaching in anatomy.

Evidence was adduced by the council to show that anatomy could not be taught efficiently if the old regulations of the council, in demanding the dissection of both sides of the human subject in the time allotted, were adhered to. This involved the dissection of two upper and two lower extremities, of both sides of the head and neck, and of both sides of the trunk. This regulation has been enforced in the past, and with what result? Practically no one student was able to perform his dissection with the amount of care and deliberation which is absolutely essential if profitable work is to be done. The time allotted (two sessions) is far too short for the task imposed; and although the student fulfilled the requirements of the council in doing the actual dissection, still of necessity it was done so hurriedly that the facts disclosed were not mastered in detail, and the inevitable result has been that the student has reaped little benefit from his labors.

Let us ask, what are the benefits derived from dissection? We answer:

(1) A practical knowledge of anatomy is gained, each statement read from the text-book is verified by actual dissection, and we learn to recognize the structures described by touch and sight.

(2) The careful dissector is drained in accuracy of observation. Unless he learns to observe accurately, he can never reason accurately.

(3) A student who learns to dissect carefully attains an amount of manipulative skill in the handling of knife and forceps, the value of which it is difficult to overestimate.

We hold that such benefits are only derived when the student is permitted to proceed with his work calmly and deliberately, with no occasion for hurry. The council in the past put a premium upon rapidity of dissection; we even go further and state, without fear of contradictory proof, that the old regulations hindered the student in acquiring that practical knowledge of anatomy which he should have done. There was no time for thoughtful work; the main object of the dissector was to perform the actual cutting and carving prescribed for him without any possibility of his being able to study carefully the results of his labors step by step.

Inaccurate impressions were formed, and, in fact, far from inculcating a habit of care and precision in his work, he formed a habit of careless and slovenly work, which, in most instances, would never be recovered from during the remainder of his student days.

The matter is of tremendous importance, and we have seen so much of the evil effects of the system in the past that we are thankful to find that the council has come to our aid in having the matter rectified. The teachers of anatomy are not alone interested. If carelessness and superficial work is to be encouraged in the first-year student in the dissecting room, we may depend upon it that habits there formed will assert themselves throughout the remainder of the student's career, and that his faculty for doing honest, faithful work has been blunted. This will show itself in the lecture theatre and at the bedside, as well as in the dissecting room.

The council may not wish to interfere too greatly with the *methods* of teaching; their object, no doubt, is to exact a high standard of examination; they do not wish to teach the student, but rather to test by a rigid examination whether or not the student has a knowledge of his profession. By all means raise the standard as high as it can be done consistently; but let us have the best means at our disposal for preparing students for their examinations, having always in view the fact that the students are forming habits which will stick to them throughout their life's work.

The council is undoubtedly right in insisting on a *minimum* amount of dissection, but they should not hamper the student by requiring more than he can well accomplish.

This regulation does not prevent the student doing more work, should he find the time for that purpose; nor does it prevent any university from exacting more, should they deem fit.

As we have already stated, the council has come to our aid in this matter, but unfortunately they have not satisfied all their constituencies. They may think it necessary to reconsider the matter; if so, we ask them, in all fairness, to appoint competent judges to investigate the matter. A committe might be formed whose duty it would be

to visit the various schools and take evidence. We are sure that the various medical colleges would welcome such a method of procedure. Let them get at the facts with regard to the actual work of the students, and with regard to the care and precision with which he masters all the minute details of an anatomical dissection. We firmly believe that the result of such an investigation would be so convincing to the council that no further attention would be directed to the matter.

THE COUNCIL AND THE DEFENCE ASSOCIATION.

A conference between the legislative committee of the Ontario Medical Council and the Medical Defence Association of Ontario, together with some other members of the profession, was held in Toronto on Sept. 29th. An extended discussion, on matters to which we have before referred at some length, took place, and the gladiators on either side soon became somewhat warm. Dr. Williams, the past-president of the council, was slightly indiscreet in the early part of the meeting, and almost destroyed any chances of an amicable agreement. His remarks about the honesty, or otherwise, of those who wished to evade the payment of the annual fee caused considerable indignation among those present, and called forth many bitter replies.

The "Defence" men certainly scored many points against the ex-president in discussing some of the statements made in his address with reference to matters of finance. At one time the discussion degenerated into a dispute, and the opposing sides appeared to diverge rather than converge. When things got very bad, and the probabilities of a general break-up in confusion were imminent, Dr. Bergin made some temperate and sensible remarks which produced a soothing effect. As a consequence both sides began to give and take, and something like a compromise was effected.

We need not go into particulars, as a report of the proceedings has already appeared in the Toronto daily press. In a general way, however, we may say that the suggestions made some weeks ago by THE PRACTITIONER were accepted; the penal clause will not be enforced; the territorial representation will be increased. We think it will be nearly right, considering all the circumstances; but it seems a pity that the council had to be taken by the neck, and choked, before its committee would agree to any concessions.

THE PARK HOSPITAL.

The opposition to "the Park Hospital scheme" which has recently arisen in university circles is about as remarkable as it is deplorable. There appeared, for a time, to be a danger that the opponents of the scheme would kill it. We think now that such fears were groundless, and that in all probability a new hospital in Queen's Park will, in the near future, be ready to open its doors to the sick and wounded. It has always been understood, however, that only those afflicted with non-infectious diseases will be admitted.

We publish in this issue a portion of the admirable address recently delivered by Mr. Mulock, the vice-chancellor of the university, at a public meeting of the graduates held in Toronto, September 12. The publication of this address in the Toronto *Globe* and its distribution among the graduates have created much interest. The proposal to establish such a hospital has so many points in its favor that it is difficult for most of the graduates to conceive any possible reason for opposing it that is worthy of the consideration of fair-minded men.

THE PAN-AMERICAN MEDICAL CONGRESS.

This congress will be held in Washington, September 5, 6, 7, and 8, 1892. Dr. C. A. L. Reed, the chairman of the Committee on Organization and the secretary-general of the congress, tells us that after extended correspondence between himself and Dr. Maragliano, the general secretary of the International Medical Congress, it has been arranged that the meeting of the latter congress will commence in Rome, Sept. 24, 1893. This will leave an interval of sixteen days between the two meetings, during which time it will be quite easy to make the trip from Washington to Rome. Some parties are now making an effort to charter a steamer to go

from New York to Rome and return if a sufficient number of physicians can be found to take passage. The official announcement of the Pan-American Congress will be issued shortly.

Meeting of Medical Societies.

CLINICAL SOCIETY OF MARYLAND.

W. T. WATSON, M.D., *Secretary.*

Baltimore, June 3rd, 1892.

The 268th regular meeting of the society was called to order by the president, Dr. Robert W. Johnson.

Dr. Hiram Woods related a case of

ECTROPION OF BOTH UPPER LIDS FROM DISEASE OF THE ORBITAL ROOF,

and exhibited the patient.

When the patient, a colored boy, first came under Dr. Woods' care he had had abscesses over the upper eyelid of each eye, which had ruptured spontaneously, leaving fistulous openings about the middle of each lid, from which pus exuded. With a probe, small areas of denuded bone could be felt about an inch back in each orbit. The patient was put upon tonic treatment and the sinuses healed. The lids were enormously hypertrophied, and the entire edge of each lid was fastened with cicatricial tissue to the edge of the orbit. Dr. Woods operated upon one eye in October, 1891, and upon the other three weeks ago. The edge of each lid was dissected from its position and stitched for the time being to the lower lid. The skin was freely undermined, and the horizontal incision was converted into a vertical one. The results were highly satisfactory.

Dr. W. B. Platt read a paper on

RUPTURE OF THE PLANTARIS TENDON,

relating four cases that had occurred in his practice.

Dr. Chambers was inclined to doubt the existence of such a thing as rupture of the plantaris tendon. From the attachment and relations it would not be likely to rupture. The pain is usually at a distance from the weakest portion of the tendon, and the ecchymosis is more abundant than we would expect to find in a rupture of a tendon. Some good surgeons incline to the idea that these symptoms point to the rupture of a blood vessel. The deep veins may be in a varicose condition.

Dr. George H. Rohé related four cases of

PUERPERAL INSANITY,

in which he had removed the uterine appendages, and exhibited to the society the specimens removed.

Case 1.—White woman, 33 years of age. Married at seventeen years of age. This marriage resulted in the birth of one child. In two and a half years she became widowed, and four and a half years later married a second time. In 1882 she gave birth to a second child, and immediately afterward suffered from puerperal mania, which lasted five months. She remained well three years and then again developed insanity, and was admitted to the insane asylum with acute mania. When admitted to the hospital she was excited and disposed to fight. She had especial aversion to her husband. She indulged in obscene language. She showed no improvement, but a gradual failure of mental faculties. Suffered from incontinence of urine, and paid no attention to the calls of the rectum. Exhibited great excitement during menstrual period.

Physical examination after coming under Dr. Rohé's care in 1891: Unilateral laceration of the cervix up to the vaginal junction and intrapelvic induration on the same side. Perineum ruptured into the rectum.

Abdominal section performed October 6th, 1891, and appendages removed. Clinical conditions present: Right ovary cystic; left ovary cystic and adherent in Douglas' cul-de-sac; thickening and congestion of broad ligament on right side.

After-history: Patient recovered fairly well from operation. Had an attack of peritonitis, which yielded promptly to the usual treatment of purgation. The stitches were removed on the seventh day and the wound found perfectly united. December 10th: Patient dresses and undresses herself. Seems much interested in looking at books. Appetite good; sleeps well; does not indulge in profane and obscene language as much as formerly. A week later, very much interested in plants and flowers in the wards, and waters them regularly. Appetite good; sleeps well; general behavior very much improved. Present time: Improvement continues. Has written several letters to her husband and to her children, showing decided interest in her family life.

Case 2.—White woman, aged 37 years; married 13 years. Mother of six children. Admitted to the asylum May 16th, 1890. Insanity developed during the period of lactation. Previous to insanity she was amiable, cheerful, and industrious. Her mother had been insane and her father was very intemperate. Had been insane three days when admitted. Had a previous attack ten years before, probably in connection with the birth of a former child, but no exact history. Was subject to hallucinations. Thought nearly every man she met was her brother in disguise. Imagined that she had the power of healing by laying on of hands. Had a decided tendency to expose her person. Menstrual period irregular. Emaciated, with haggard appearance. Appetite poor; slept poorly; nervous and restless during the day. Put upon a special diet of eggs, milk, beef-tea, brandy, etc., but improvement was very slow. The approach of her menstrual periods could be predicted by the alteration in her behavior in the ward.

Physical examination: Bilateral laceration of the cervix; thickening of posterior lip; intrapelvic inflammatory induration of the left side, sensitive to slight pressure.

Operation November 25th, 1891. Left ovary was found adherent. Breaking up of the adhesions occasioned some bleeding. Tube on the left side congested and convoluted.

After-history: Recovered well from the operation. Sutures were removed on the seventh day. Note, December 17th: Patient cheerful; appetite good; sitting up in her room, sewing; conversation coherent, and has at present no hallucinations, no

delusions; simply nervous symptoms such as are present in the majority of cases of induced menopause. At the present time is increasing in flesh and strength; complains less and less of headache and backache, and converses entirely rationally. Is much interested in the work about the place, and is ready to go home at any time her husband is prepared to make the proper provision for her.

Case 3.—White woman, aged 39. Married fifteen years. Has had seven children, the last one born four months previous to her admission to the hospital in August, 1887. Before insanity was amiable and industrious and neat about the household affairs. No insanity was ever in her family. Insanity came on suddenly after the birth of the last child. First symptom was that some one was after her trying to kill her. She used vulgar and obscene language. Tried to kill her mother. Her language in the hospital was of the most obscene character. She would tear her clothes, break the furniture, and tear the plaster from the walls. These attacks were intermittent. About six months ago she began to fall off, and at the time of the operation was pale and thin.

Physical examination: Deep laceration of cervix on both sides, with eversion of the lips of the cervix and enlargement of the uterus.

Operation, December 15, 1891: Uterine appendages removed; small cyst in left broad ligament; one ovary was adherent; uterus somewhat enlarged.

After-history: Recovery from operation very good. From being one of the worst patients in behavior, language, and general character, she became one that could be kept upon the best ward of the house. She is not well, and probably never will be. She has gained in flesh; sews, goes out on the lawn, attends the dances regularly, and behaves very well. This patient and the first one will probably never be well, as both are in a condition of somewhat advanced dementia; but they have become better patients.

Case 4.—White woman, aged 28 years. Native of North Carolina, and resident of Baltimore city. Admitted in 1891, suffering from mania. Mother of three children. Had an attack of insanity after the birth of the first child, and another after the birth of the second child. The third attack came on twelve and a half months after the birth of her third and last child; the second and third attacks considerably after the births of the respective children. The first attack was a true case of puerperal insanity, and probably determined the others. When admitted was in a state of excitement, and indulging in obscene language. Her temperature ran up and her heart grew weak. She was put upon digitalis, eggs and milk every two hours. She gained in strength, but her mental symptoms were unimproved.

Physical examination: Deeply lacerated perineum, lacerated cervix, and prolapsed ovary.

Operation, March 9th. Appendages removed. Great enlargement of ovaries of both sides.

In this case, hereditary taint was denied. Her menstrual periods were regular. While at home she was jealous of her husband's sisters. Was fond of drink, but had not access to much of it. Was indolent and careless. Was fond of talking about sexual matters.

After-history: Three weeks after operation, mental condition good; language to physicians chaste; appetite good. May 8th, 1892, was discharged from the hospital, recovered.

This woman up to the time of the operation used the most profane and obscene language Dr. Rohé had ever heard. When she recovered from the effects of the anæsthetic she burst into tears, and asked the doctor's pardon for the ugly language she had used. She never afterwards used any obscene or insane language to any one connected with the hospital.

In conclusion, Dr. Rohé said: I believe that in these four cases we have a contribution to the etiology of puerperal insanity. I believe that puerperal insanity is a phase of insanity that is due to absorption of septic matter, and when it is recurrent that it is the result of some reflex irritation due to an inflammatory condition in the pelvis or pelvic organs. All the cases which I have examined show some lesion of the genital canal remaining from parturition. The result of the treatment in these cases show this—that if cases are taken before structural alterations have taken place in the brain, before dementia has come on, in the large majority of cases restitution of the mental faculties can be accomplished. There is another advantage, I believe, in this radical mode of treatment of this condition; that is, that a woman whose appendages have been removed will never have another attack of puerperal insanity at all events.

Dr. Winslow: Are these selected cases? Are they all the operations which Dr. Rohé has performed for insane conditions since he has been at Spring Grove?

Dr. Rohé: This is a series of cases due to one single cause. I have operated upon fifteen cases. In nearly every case there was some lesion of the pelvic organs. I expect to report all of these cases in the future. I believe that I will be able to report four or five as restored mentally. Nearly all have shown evidences of improvement. They are better patients; they are not so disposed to soil; they can be kept on better wards with quieter patients. This is a decided gain for the management of the hospital.

Book Reviews.

Diseases of the Eye. A handbook of ophthalmic practice. By G. E. de Schweinitz, M.D., Professor of Diseases of the Eye, Philadelphia Polyclinic; Ophthalmic Surgeon to Children's Hospital and to the Philadelphia Hospital; Ophthalmologist to the Orthopædic Hospital and Infirmary for Nervous Diseases; Lecturer on Medical Ophthalmoscopy, University of Pennsylvania, etc. Forming a handsome royal 8vo. volume of more than 600 pages. Over 200 fine wood-cuts, many of which are original, and 2 chromo lithographic plates. Price, cloth, $4.00 net; sheep, $5.00 net. Philadelphia: W. B. Saunders, publisher. Toronto: J. A. Carveth & Co.

This work is, as it claims to be, a handbook

for students and general practitioners. It endeavors by explicit language, by copious and plain illustrations, to teach the physician not only to arrange and tabulate the knowledge he may have gained regarding the eye, but also to give him greatly increased skill in its application. Heretofore, the manuals and more elaborate works have not paid as much attention to this, and consequently this work will, in this respect take a position between the two, well-earned, and fill a want. In other words, it gives by its methods such capital object teaching that there is presented to the physician who has not had the benefit of clinical eye-work so plain an exposition of diseases of the eye, and their medical and surgical treatment, that he feels as if they had been, to a certain extent, seen by him. As to the arrangement and the reliability of the description of the various affections of the eye, the verdict may he given that the same confidence may be reposed as has been heretofore bestowed upon our best manuals. Certain parts could be adversely commented upon; but still, after weighing this, the decision should be that it is well adapted to the wants of those for whom it is written.

Diseases of the Nervous System. By Jerome K. Boudny, M.D., LL.D. Philadelphia: J. B. Lippincott Co. Toronto: J. A. Carveth & Co.

The first edition of these lectures was published in 1876, and has been for some years out of print. In the present work, the lectures have been thoroughly revised and rewritten. The subjects taken up in the first part are circulatory disturbances and inflammation of the brain and membranes, while the latter half is devoted to a consideration of insanity. The author intends to publish in a second volume his lectures on spinal, functional, and puerperal affections. The book is written from a clinical rather than a pathological standpoint, and will therefore be of value as a practical treatise in the hands of the general physician.

THE ENGLISH DISEASE.—The poor, unenlightened Mohammedans of Damascus, who couldn't be expected to know better, call drunken men victims of "the English disease."

Personal.

DR. MILNE, of Victoria, B.C., spent a few days in Toronto after the Ottawa medical meeting.

DR. CHOWN, of Winnipeg, was in Toronto, October 1st.

DRS. HOLFORD WALKER and Chas. R. Dickson, of Toronto, attended the meeting of the American Electro-Therapeutic Association, held in New York, October 4th, 5th, and 6th.

Therapeutic Notes.

HAY ASTHMA.—Dr. Edward S. Blair has treated a girl of ten years who for one-half of her life had been subject to annual attacks of this disease. Under the use of potassium iodide and grindelia robusta there were slight catarrhal symptoms, but on lying down marked wheezing and dyspnœa. These symptoms were checked entirely by the fluid extract and euphorbia pilulifera [dose not stated], and the relief of these symptoms were followed by a marked increase in flesh and strength.—*Therapeutic Gazette.*

TREATMENT OF VOMITING OF PREGNANCY.—Routh states that in seven years' practice he has always been able to arrest the vomiting of pregnancy by brushing the cervix and lower cervical canal with a mixture of equal parts of iodine, iodide of potassium, spirits of wine and water.

In general the vomiting ceases immediately after the application. If the vomiting should recur, the cervix should again be brushed. Generally after this the vomiting will be permanently relieved.—*Der Frauenarzt, Therap. Gazette.—Medical Mirror.*

COUGH MIXTURE:

R.—Syr. tolu. - - -
Syr. pruni virg. - -
Tr. hyoscyami - - } *aa* ʒi
Spts. eth. co. - -
Aquæ - - - - M.

Sig.—A teaspoonful every hour.

—*Janeway.*

DIURETIC IN CARDIAC DROPSY:

℞.—Infus. digitalis - - ℥iiiss.
Acet. scillæ - - - ℥ss.—M.
Sig.—A tablespoonful two or three times a day.—*Bartholow.*

HÆMOPTYSIS:

℞.—Plumbi acetat. - - ℈ii
Pulv. digitalis - - ℈i
Pulv. opii - - - gr. x—M.
Ft. pil. No. xx.
Sig.—One pill every four hours.
—*Bartholow.*

APHTHÆ OF THE MOUTH:

℞.—Sodæ sulphitis - - ℥i
Aquæ - - - - ℥i—M.
Ft. lotio.
—*Jenner.*

Miscellaneous.

PRIZE ESSAYS ON THE ACTION OF ALCOHOL AND ITS VALUE IN DISEASE.—The American Medical Temperance Association, through the kindness of J. H. Kellogg, M.D., of Battle Creek, Mich., offers the following prizes:

(1) One hundred dollars for the best essay "*On the Physical Action of Alcohol, based on Original Research and Experiment.*"

(2) One hundred dollars for the best essay "*On the Non-Alcoholic treatment of Disease.*"

These essays must be sent to the secretary of the committee, Dr. Crothers, Hartford, Conn., on or before May 1, 1893. They should be in typewriting, with the author's name in a sealed envelope, with motto to distinguish it. The report of the committee will be announced at the annual meeting at Milwaukee, Wis., in June, 1883, and the successful essays read.

These essays will be the property of the association, and will be published at the discretion of the committee. All essays are to be scientific, and without restrictions as to length, and limited to physicians of this country.

Address all inquiries to T. D. Crothers, M.D., secretary of committee, Hartford, Conn.

SMALLPOX IN TORONTO.—The outbreak of smallpox in the Toronto General Hospital created a certain amount of alarm, but prompt action on the part of Dr. O'Reilly and the staff appears to have prevented any further infection. The local Board of Health, and Dr. Allen, the Medical Health Officer, deserve great credit for their action in the matter. Acting on Dr. O'Reilly's report that it was dangerous to keep the two smallpox patients in the hospital, they set to work, under the supervision of Dr. Allen, and erected an isolation hospital, using ordinary rough boards, in two days. It has a capacity for twelve patients and the necessary attendants, and is complete in all respects, especially as to plumbing and water supply. The work was done almost entirely by the Board of Health staff, assisted by convicts, and went on continuously night and day.

UNIVERSITY SENATE ELECTIONS.—The election of medical representatives in the Senate of the University of Toronto resulted as follows

I. H. Cameron, M.B.,	Toronto	487
Adam H. Wright, M.D.,	"	468
L. McFarlane, M.D.,	"	441
W. H. B. Aikins, M.D.,	"	412
R. A. Reeve, B.A., M.A.,	"	381
A. B. Macallum, B.A., M.B.,	"	273
John A. Mullin, M.D.,	Hamilton	267

The first four were declared elected.

VIVISECTION.—At the annual meeting of the British Medical Association the following resolution was proposed by Mr. Joseph Hutchison and unanimously adopted: "That this general meeting of the British Medical Association records its opinion that the results of experiments on living animals have been of inestimable service to man and to the lower animals, and that the continuance and extension of such investigations are essential to the progress of knowledge, to the relief of suffering, and the saving of life."

THE RETIREMENT OF SIR JOSEPH LISTER.—Sir Joseph Lister has reached the age of sixty-five, and, in accordance with the rule as to age limit, has been retired from the chair of surgery at King's College Hospital.

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UNIVERSITY OF TORONTO.

MEDICAL FACULTY.

INTRODUCTORY ADDRESS FOR SESSION 1892-3,

Delivered October 3rd, 1892,

BY WILLIAM OLDRIGHT, M.A., M.D.,

Professor of Hygiene, University of Toronto.

Mr. Dean, Ladies, and Gentlemen:

By the request of my colleagues, I have the honor of delivering the introductory address of the academic year on which we are about to enter.

Of the changes which remind us, as we reassemble year after year, of the transitory nature of mundane things, there have been, since we last met, more than the usual number. We need not call over the muster roll to recollect that the grim reaper has been busy amongst us. The absence from our midst this evening of one who belonged, not only to us, but to all the world of literature and science, of religion and philanthropy—the want of that familiar presence which for nearly forty years has formed so large a part of all gatherings of this university constantly makes itself perceived. It is difficult to conceive of any circle of thought or activity in which the loss of Sir Daniel Wilson will not be felt and mourned. A great thinker, deeply interested in his fellow-men, he was to be found in so many avenues of life mingling with them, laboring for their welfare, deriving pleasure from this work and intercourse, and amid it all remembering and publicly recognizing Him whose servant he was. His sense of gratitude and responsibility to God, his good will and sympathy for men, brought him into the foremost ranks of Christian and philanthropic workers. By all classes and ages he will be missed; from the Senate, from the Council, from the public meetings of all the faculties, from scientific assemblies, from gatherings for the promotion of social and religious objects; by the students in the work of their various societies; by the poor boys for whom he founded the Newsboys' Lodging—but it is useless to individualize further, for his field of work was wherever he knew some way in which he could materially aid in the advancement of the race. There is left, however, the consolation, not only to those who were nearest to him, but to us all, that he is not entirely lost to us, for "he being dead, yet speaketh": in the things which surround us, in the work and life of the university, there are constant associations which bring him before us. When our time comes to depart, may we, in our several spheres, be found ready even as he was.

Another familiar face which we shall miss on commencement days is that of Robert McKim, who for over thirty years has officiated as bedel of the university. On the very same afternoon that the president passed away he was followed through the dark valley by this one, whom the president's daughter designated by the emblem, "My father's faithful friend.'

He was a man of unflinching trustworthiness, faithful and devoted to duty, and had won the respect and esteem of those with whom he was associated.

By a sad and strange coincidence, within forty-eight hours followed the death of one who was associated with the earlier history of the university. I refer to Mr. W. G. Storm, the architect under whom the building which has recently been restored was originally designed and erected.

Passing from these, who were gathered in as the ripened grain, to the name of the last to whose loss I shall refer, I am reminded of an incident of that matriculation examination when I first met Professor Wilson. In the hall which stood within a few feet of the spot where we now are there was handed to us—I think it was by the then president, the late Dr. McCaul—a paper containing those beautiful lines of Mrs. Hemans:

"Leaves have their time to fall,
And flowers to wither at the north wind's breath,
And stars to set—but all,
Thou hast *all* seasons for thine own, O Death!"

Fresh from the halls of this university, and full of promise for a successful and useful career, Dr. A. A. B. Williams was cut off in the flower of his youth. He died at Belgrave, where he had recently commenced practice. His father, Dr. R. Watson Williams, was a fellow-student with us of a previous generation, so that in joining with our younger brethren we extend to him a double measure of sympathy in the sore affliction through which he has been called to pass.

I have felt that I could not proceed to address you regarding the affairs of another session without expressing my sorrow and your sorrow at the losses we have sustained. Without unduly anticipating the more formal records, I know that I may count upon your sharing in this expression of it, and upon your forbearance with me in regard to any personal reminiscences in connection with the memory of those with whom I have been associated in various ways for so many years.

The loss of our late venerable president has necessitated another change—the appointment of his successor, and I beg to tender to the president my good wishes and congratulations and those of my colleagues of the university faculty. It must be to all of us a matter of congratulation that the Government has chosen our new president from the university staff; not only so, but that it is a graduate of this university who has by his attainments, long experience, and successful record on that staff been found fitted to worthily occupy the position.

There are occasions when one may properly welcome people to their own house, and such now becomes my pleasing duty. The audience which I have the honor to address represents the public—the people of Ontario; and to the people of Ontario belongs the University of Toronto, of which this is the medical faculty. On behalf of the faculty, then, I may say that we are very glad to see here to-night so large and representative a gathering. I suppose that possibly some persons in this audience are aware that a university election is on the *tapis*, and that there has been some discussion regarding matters in which the medical faculty is concerned. Fortunately, what I have to say to you in this connection does not come in conflict with the announced opinions of the debaters of either side. Those who have studied the history of the university will have noted the various changes in its policy in regard to the existence and support of a medical faculty. To render my remarks intelligible to those who have not, permit me to make a brief retrospect. During the first ten years of its existence (first as King's College, and subsequently as the University of Toronto), it followed the example of the great European universities, and had a teaching medical department; but motives of personal pique and ambition caused the abolition of the faculty of medicine as a teaching institution. This subject has been so often dwelt upon by our late president and other prominent friends and authorities of the university that I will not now enter into particulars. For thirty-four years the University of Toronto went on content to act, so far as the profession of medicine was concerned, as a mere prescribing and examining board, a sort of foot-rule or weigh-scale to measure the attainments of the great bulk of the students of the Toronto School of Medicine and of a few from other teaching colleges, and receiving from these students just

about as much love and devotion as could be evoked by such semi-inanimate functions. Fancy a boy's love for a mother whose only care of him was to hear him "say his lessons" once a year and decorate him once in his lifetime with a ribbon around his neck! Fancy the love, loyalty, and devotion of a graduate to an *alma mater* which consisted of an examining board, and whose visible presence was manifested to him once in his lifetime—on graduation day! For the first twenty years of this period a somewhat more cordial bond existed in the fact that the students of the Toronto School of Medicine took their chemistry and natural history at University College, and that for a few years they occupied a building contiguous to that college. But, subsequently, other universities, realizing the importance of extending their roots so as to have a stronger hold throughout the province, offered inducements which attached the teaching colleges to themselves, and left the University of Toronto as a sort of institution upon which a few of the more brilliant students drew once a year for medals and scholarships and took their degrees. In the years 1883, '84, '85, and '86 the number of graduates were 10, 10, 14, and 16 respectively. University men eager to increase the influence of the university and to extend her benefits to all classes of the community were dissatisfied with this condition of things. A number of medical men imbued with love for their profession, and seeing great possibilities for scientific advancement of medicine and surgery, thought that sciences which in other countries are advancing with rapid strides, and in which deep and careful research is being carried on and great discoveries made, should be taught in the national university, and should not be left entirely to the exigencies of private individuals and the control of private corporations. Nor were these views confined to medical practitioners. Thoughtful and observant men in other walks of life cannot fail to notice the vast fields which await toilers in the medical sciences, and the blessings to humanity which will follow from their successful cultivation; and they know what aid and encouragement and stimulus the workers will receive from the support and assistance of a well-equipped university holding the position and standing of the University of Toronto. Consequently, the medical faculty has received the warm and active support of the chancellor, of the vice-chancellor, of the late president of the university, of the present incumbent of that office, and of many of the professors of the other faculties, some of them during the negotiations for its re-establishment, and of others since it has been re-established. The Government having concurred in the views which led to the restoration of this faculty, offers were officially made by the Senate to the two medical colleges in Toronto to join on equal terms in its formation. Trinity Medical College refused, the Toronto School of Medicine accepted, and the medical faculty of the University of Toronto was restored in 1887.

In proceeding to speak of the advantages of this step to the public at large, to the profession, to the university, and to the students, I may be challenged with the imputation of not being a disinterested speaker. I am free to admit the correctness of this imputation. My connection with the University of Toronto began as a matriculant in arts thirty-three years ago, and during all the intervening time, with the exception of three years, either as student, examiner, teacher, or senator, I have been intimately connected with the University and University College. It is no wonder, then, that, next to home and country, the University of Toronto is dearer to me than all other earthly institutions! This love has been increased by the two memorable attacks upon her through which we passed in the first two decades of the period to which I have referred. And this attachment would be natural even were she not, as she is, the noblest educational institution in this Canada of ours! I am free, then, to admit that it has been to me a great gratification to be bound by an additional tie, and that in connection with my life work, to the institution I love so well. If it is meant that I and my colleagues of the Toronto School of Medicine have received any pecuniary benefit, I reply that it is untrue, a fact which may be verified by a comparison of figures.

I trust you will pardon my making these personal allusions; but it seemed necessary to defend from attacks (chiefly from outside this university, I am happy to say) the motives of the members of the medical faculty. Our

self-interest is that we are proud to be part and parcel of this university, and to share in the work of developing the glorious future which is before her.

In considering, then, the advantages which have accrued, and will accrue, to these various interests, I will commence first with those I named last—last, but not least—the students. It must be remembered that whatever improves the educational facilities and standing of the student improves the profession to which he belongs, confers increased benefits on the people, and enhances the position of the university; it must also be remembered that the main work of the university is with, for, and by its students; that existing "*parum clarem lucem dare*," "to give a light a little clear," its first and strongest rays must shine upon them. Let us, then, compare the advantages possessed by the medical students of the University of Toronto with those possessed by the students of the Toronto School of Medicine at its close. In former times the fundamental sciences of biology and chemistry were taught by gentlemen who were obliged to devote the larger portion of their time to the active professional work necessary to obtain the means of livelihood, and could only devote a small portion of it to teaching. Now they are taught by an increased staff of gentlemen whose life work it is to devote themselves to systematic research in these special subjects, to the study of the latest discoveries, improvements, and methods of teaching them, and to impart this knowledge to students who have no other duties to distract them from their work. I need not dwell at length on the importance of a correct and thorough knowledge of the phenomena of life, of the make-up of the materials of the human body, the offices of its various parts, and the action upon them of surrounding substances and influences.

The separate study of physics, the special department of our president, is another new departure. The intimate relation of hydrostatics with the fluids of the body, of pneumatics with respiration and ventilation, of heat, of electricity, of magnetism, of optics and acoustics with various functions of the organism, will be self-apparent.

All these subjects have a permanent home in the science portions of the university, and they are illustrated by means of laboratories stocked with the necessary appliances, the teaching being illustrated, not by a few articles being brought forward from some cupboard or corner at lecture hour, but by a standing exhibit ready for the practical demonstrations which are given to the students, and in some instances the students possess facilities for themselves working which they did not possess before, as, for example, in making microscopic preparations for themselves, having the control of a microscope and a certain amount of apparatus always ready for work. In anatomy it was deemed desirable that a greater amount of practical instruction should be given, and that students should receive more individual attention, and to accomplish this the staff in this department was doubled. There seems on the part of the Senate a tendency to make the departments of anatomy and, more especially, pathology less dependent upon the commissariat exigencies of the busy practitioner. In pathology the arrangements brought about in the last five years are of very great importance. Five years ago this subject was undertaken by the professors of medicine and surgery along with their other work and their practice. Now the professor of pathology devotes his whole time to collecting materials, utilizing them in teaching and in carrying on original research. In this he is assisted by a demonstrator of pathology. Increased interest in the subject has also been awakened by the discussions of the Pathological Society, with which many of the members of the university staff are connected.

I have now advanced so far in the time allotted to me without saying much about my own special department that I fancy I can hear some of the students *thinking*, in a favorite form of phraseology of theirs, "What's the matter with hygiene?" which, being interpreted, means, "Why does he not say something about hygiene?" Well, gentlemen, you know I shall have opportunities of making a few remarks to you on that subject as I meet you from time to time in the other building, and I shall not have the opportunity which I have to-night of talking of some other things.

I must, however, take advantage of this occasion to acknowledge my indebtedness to the other departments, which do so much better

than I can some of the work allied to my department upon which I used to be obliged to touch, thus relieving me in my efforts to crowd into twenty-five lectures the work for which that number is quite inadequate. I refer to the assistance which my department receives in its relations to biology and bacteriology, physiological and hygienic chemistry, physics and pathology. The physiologist continues in increased ratio the preliminary assistance which his subject has always rendered.

Whilst on this subject, I may say that the faculty and the Senate last spring adopted resolutions looking towards the formation of a museum of hygiene; that with the view of advancing this project I visited certain hygienic institutions in Baltimore, Washington, and Philadelphia. The object is to collect models, diagrams, and samples of apparatus connected with plumbing, drainage, disposal of refuse, heating, ventilation, climatology, water supplies, protection against fire, furnishings for schools and gymnasia, food stuffs, antiseptic preparations, etc.; also of samples of defective plumbing, and other causes of disease arising from insanitary conditions. I trust that after the meeting of the new Senate the scheme will soon be put in operation.

It is gratifying to know that the appreciation of the new condition of things has not been confined to the members of our own university, including the students, professors, and directorate, but that outsiders have spoken in glowing terms of these arrangements. Amongst those who have visited us and spoken encouraging words, I refer to Prof. Vaughan, of the University of Michigan; Prof. Abbe, of New York; Prof. White, of the University of Pennsylvania; Profs. Welch and Osler, of Johns Hopkins University. The remarks of the latter are *apropos* to the comparison just given. He said: "When I look back a few years and think of the appliances and arrangements we had then in Toronto, and when I go over this building and see the beautiful arrangements, the elaborate apparatus, the splendid appliances for teaching, I feel that it is possible for one to live through a renaissance."

How the public and the students sent up by them have appreciated the change may be partially gathered from the fact that the number of students in attendance has been steadily and rapidly increasing, the numbers being as follows for the last three years:

	First-year students.	Total number of students.
1889-90.....	66	258
1890-91.....	81	263
1891-92.....	85	283

The university now not only says what subjects shall be taught, but how they shall be taught, and has moreover made such arrangements as shall secure valuable additions to her equipment from funds outside the university endowment.

Another most important advantage to the students, not only of the medical faculty, but of all the faculties, is that it brings them all into touch with each other. It is generally admitted that this rubbing of mind against mind—this acquaintance and interchange—is one of the most valuable results of attendance at university halls. How much more is this the case when the university is true to its name in the broad and literal sense! A mingling place for *all*. There are few of us medical students who took our chemistry and natural history at University College in the sixties but can call to mind pleasant reminiscences of *confrères* who have entered other walks of life; and we even now meet here and there with these men, some of whom are laboring in Christian work, others in the administration of law and justice, others in the training of youth; and we can better understand and sympathize with them, and they with us, and we can more freely unfold our minds and interchange ideas by reason of this university acquaintance in the days of "auld lang syne." It is to us a most pleasing sight to see the students of the different faculties fraternizing in the sports and amusements of the campus and the gymnasium, and in the evening reunions which take place—now, please, do not misunderstand me—within the lighted halls of your various literary and scientific societies, your Young Men's and Young Women's Christian Associations, and your other social gatherings. A little consideration will show that great assistance can be given to each other by the several faculties of the university; and whilst the medical can derive great advantages from the arts faculty, especially from the science department, so, too, can it aid the arts faculty.

By a resolution of our faculty, provision has been made for arts students in biology to avail themselves of demonstrations in human anatomy on paying such fees as will cover the actual cost. And surely it ought not to be necessary for me to point out that it should be the aim of a student in any department to advance to the highest work in that department. If the student is to delve into the secrets of biology, to examine the wondrous work of the Supreme Architect, and to obtain his first knowledge from the more simple forms, he certainly ought to study them where they are found in their most complex form, their highest form, the form which was to "have dominion over every living thing that moveth on the earth." What would we think of the mechanical engineer who should neglect to avail himself of the opportunity of examining the machine capable of doing work, and a variety of work, exceeding in difficulty and complexity that done by all other machines? We expect him not to cease his studies with the anatomy of the wheelbarrow or the bicycle, but to understand the construction of the locomotive engine and the electric motor. Honor men in biology need not now stop at the wheelbarrow stage of existence. Let them remember that the statement that the "noblest study of mankind is man" has a physical as well as a metaphysical side.

And this last sentence reminds me that not only does our new departure extend a helping hand to biology, but it also offers to open for the inspection of the metaphysician the structures of the brain and other portions of the wondrous nervous system; to the linguist the organs of voice and speech, with all the modifying effects of the structures of the abdomen, chest, mouth, throat, and nasal cavities, and in no lower organism can these be found to the same perfection. And who will say that the practical study of these structures which distinguish man from the lower animals is of no advantage to the students in those departments? The opinion and practice of eminent students of metaphysics and of elocution are proof that they are valued aids to those studies. To the student of ethnology, to the educationist, to the student of jurisprudence, and to many others, the proximity of a school of anatomy presents facilities and advantages into the details of which we have not time to enter. During the past session the faculty of medicine voted $1,000 for the purchase of apparatus for the practical teaching of bacteriology, and Prof. Ramsay Wright devoted a month of his time after the close of his regular lecture term to the practical teaching of this subject. This course was not limited to students of the medical faculty, nor to practitioners of medicine and surgery, and, as a matter of fact, at least one gentleman of another profession took advantage of the course. When it is borne in mind how some of Pasteur's earlier experiments were undertaken in the interests of agriculture and technology, it will be evident that the benefits of a bacteriological outfit and bacteriological work and of the increase of workers in this line will not be confined to the subjects of biology, medicine, and public health.

By the harmonious co-operation of the faculties, the reciprocal advantages of the various departments may be largely increased. Additional zest is given to scientific studies by the proximity of other studies and callings in which they receive practical application. In the beneficial results of the incorporation of a medical faculty into the university the students, the public, and the university are all participators. But there is one aspect of importance, especially, to the university. It is to her interest to bring up within her own walls, year after year, a body of men who, when they go out into life and influence, shall be filled with admiration and grateful remembrance of their *alma mater* from which they have received their education: men whose student life has been identified with her life, who will have no divided affections, who know and love her, and who will consider her interests as their own. To friends of the university it will be gratifying, then, to know that the numbers of graduates in medicine, which, you will remember, were 10, 10, 14, and 16 in the years 1883 to 1886, increased this last year to 55.

It may, perhaps, be useful to remember that the changes which I have described a short time ago were not accomplished without some sacrifice on the part of the members of the teaching faculty and students. Increase in the staff necessitated, at the outset, additional ex

pense. Then, again, those teachers of the Toronto School of Medicine who were appointed examiners of the university used to be paid for their services, but when the faculty was formed the amounts which they would otherwise have received went into a surplus fund for the procuring for the medical faculty of the university permanent improvements in the way of apparatus, etc., and it must be remembered that such apparatus became the property of the university, and would so remain even after the retirement of the existing members of the staff. It was also at first arranged that the fees of students for lectures of professors of the medical faculty who were also professors in arts should go into the same fund, it being held that this did not in any way interfere with the duties of these professors as regards the arts faculty; but this arrangement has ceased to exist, I mean in so far as the fees of the professors are concerned—not the fees of examiners who happen to belong to the medical faculty; these go to the surplus fund instead of to the individuals themselves.

There is one other fact that I would state for the benefit of those who have been inclined to think the medical faculty unduly rapacious, if any such there be. In the general abolition of scholarships and medals, the funds which had always belonged to the faculties of law and medicine for the purpose of providing these went into the general fund for the benefit of the faculty of arts. The medical men on the Senate made no objection to this disposal of them, but paid out of their own income for the continuation of these scholarships; so that the faculties of law and medicine have been somewhat good-natured towards their triplet brother, and have not quarrelled very badly over their share of the birthright. When the teaching faculty was restored much inconvenience was experienced by the fact that first and second-year students received some of their lectures in the park buildings and some in the Toronto School of Medicine building on Gerrard street. The students cheerfully accepted, temporarily, the increased amount of athletic exercise, but it was found necessary to come to some arrangement whereby they should receive all their instruction in the park buildings of the university. To some of the powers that be it may not have seemed unreasonable that, as the members of the teaching faculty had incurred much expense and had surrendered valuable privileges in accepting the proposition of re-establishing the medical faculty of the university, the university should in return provide a certain amount of accommodation, more especially as some of the teaching would be available for honor men in biology and practical physiology in the faculty of arts. I do not pretend to present these as the stated views of those by whom the accommodation was arranged, for I have had no better means of knowing their views than the majority of my audience. I think possibly many of you may have heard the matter discussed, and are aware that now the medical faculty is paying into the funds of the university a rental of $1200 per annum for the use of a portion of the building to the west of us, the same amount as it pays for the whole building on the corner of Gerrard and Sackville streets, and the large museum, which has taken so many years in formation.

I have endeavored to adhere as closely as possible to a statement of facts, and in this statement and explanation I speak only for myself. I have endeavored to avoid adding to a controversy which I think has already been too lengthy, and to which too much importance has been attached. One thing, however, I will say, and I think I may say that in this the medical faculty will agree with me, that we do not desire in any way to be a burden upon the arts faculty, or to deprive it of any portion of an income now inadequate to its necessities. I have no desire to pose as a Daniel come to judgment, but I think I voice the sentiments of a vast majority of university men when I express the opinion that, with this understanding, the sooner the whole question is dropped the better it will be for the prosperity and dignity of the university as a whole, and of all concerned.

I am glad to note from the discussion that has been going on that on one very important point university men are almost unanimous. I refer to the opinion that has been expressed by all parties regarding the desirability—nay, the necessity—for providing, in the near future, funds for increased research and laboratory

work and a greater amount of practical instruction in connection with the sciences of medicine and surgery. We must take care that, in affirming the principle that the endowment now devoted to the arts faculty must not be entrenched upon, we are not understood as affirming that no further endowment is needed for the faculty of medicine. It surely is not to be admitted that these sciences have come to a standstill; that we are not to keep pace with the advances they are making elsewhere on this continent and in Europe; that we are to take our information at second hand; that our students must forever take post-graduate courses at institutions in the United States and Europe if they wish to do the highest work. And if this is not to be the case, more money must be provided, for the things which are required cannot be obtained without money. From whence is it to come? Let us consider the possible sources; they may be classified thus:

(1) From the fees being raised.

(2) From increase of fees resulting from increased numbers of students.

(3) By diminishing the salaries of the professors.

(4) By private bequests.

(5) By state assistance.

Those who say that the fees of students should be raised argue that, the profession being already overstocked, students seeking to enter its ranks should not be assisted. Now, if this argument means anything it means increase the fees and diminish the numbers; and, if this be done, how is the amount derived from fees going to be increased? But, supposing there are too many men in the profession, would it not be better to make the entrance depend upon a higher intellectual qualification standard rather than a higher money standard? But we have already shown that an adequate amount cannot rightly be expected from this source. Nor will the increased number of students, with an increased number of fees, sufficiently meet the case, for our experience has shown us that more students means more demonstrators, more material, and more laboratory accommodation. Of course the increase will mean some improvement, for the number of students listening to a didactic lecture can, within certain limits, be increased without detracting at all from the efficiency of the lecture. But as our teaching is becoming more and more practical, training the eye, hand, and powers of observation of the student, the number of demonstrators, amount of material, accommodation, and apparatus must increase.

Then, as to deducting the funds from the salaries of the professors, you will see by a reference to the Report of the Standing Committee on the Faculty of Medicine that two of these, devoting their whole time to teaching, receive $1500 per annum, and the rest from $300 to $750. You can make your own deductions—I do not mean from the salaries, but from the facts.

With regard to the next source—private benefactions—we are quite free to say that we consider it a very proper and commendable one; and we hold up as worthy of admiration and imitation the acts of Blake, Mulock, and Rossin, graduates of the university, and of the late Mrs. Mulock, of Mr. Ramsey, Dr. Balfour, Dr. Richard Noble Starr, the bankers of Canada, and, last but not least, both in arts and medicine, those of the late Hon. John Macdonald, all of whom have shown themselves in such a substantial manner to be friends of the university.

But, notwithstanding the hopes we may entertain from the good example of these and other benefactors, there is still ample need of the assistance of the state—the people—if we are not to fall behind. And we maintain that it is a duty the people owe to themselves. The public cannot afford to neglect those means which shall bring to them the best results in regard to public health, whether we apply that term to preventive or to curative medicine and surgery. Statistics there are in abundance to show that states have received back, in the saving of life and loss of time, an hundredfold—or hundredfolds—for investments made in hygienic measures. The same holds true of all judiciously expended aid to scientific advance in the medical sciences.

Against the granting of public money in the directions I have indicated, it has been urged "that it is not the duty of the state to use public funds of any kind in educating students for a special profession, such as medicine or law, any more than for any other calling by which people

earn their living." Now, if this means anything, it means that about the only class of men who should be educated at the public expense are those who might afterwards shut themselves up in a cloister, where their education could be of no use in gaining a living, or who are so well off that they do not need to earn a living. And what, then, of the teaching conducted in the School of Practical Science? Do engineers and architects not use the knowledge imparted there in earning their living? Is the anatomy, whether normal or morbid, of a human being of less importance to the human race than that of a bridge? Which cause the most misery, the tubercle bacillus and its work, or defective beams and their results? And what of the teaching profession? Will anybody say that languages and mathematics must not be taught because men earn their living by the acquisition of them and the teaching of them again? It will at once be seen that if subjects are useful as a means of developing the mind or of imparting a good basic substructure, or if a greater amount of good to the masses will result from public assistance than by relying on private effort, the fact that the individuals acquiring them may at the same time obtain from them a financial return to themselves should be no argument against public assistance.

Another objection that has been urged is that the work can as well be carried on by private effort. This is not correct. For pathology we want far more time, more appliances, and more undivided attention than can be devoted by the practitioner or than can be paid for by the fees of the students. One sub-department of it alone, pathogenic bacteriology, requires the constant and undivided attention of more than one man. Fancy Pasteur or Koch and their respective labors being developed from the private resources of the funds of some two hundred students divided between two or three dozen practitioners!

The subject of hygiene being now taught, to a certain extent, in all our schools, the place of this department in the university and its interrelations with other faculties and departments, and its claim on public sympathy and support, ought to be evident to all. In this department there are experiments to be conducted with great advantage and much pecuniary gain to the public which would occupy far more time and constant, regular watching than the private practitioner can give to them, or than can be given with the resources at his command.

There are many subjects, too, such as quarantine, sewerage, disposal of sewage, water supplies, which are of little or no use to the practitioner of medicine or surgery in the daily work of his profession. There is also much information of value to the public that has to be acquired by experiments of a prolonged character. It may be said that such work should be conducted by boards of health; but what of the training of the students and health officers of the future?

I think I may fairly ask why the people of Ontario cannot do wisely what the people of her neighbor Michigan have wisely done. The endowment of the University of Michigan is mainly derived from four sources: (1) A land grant from the United States, which produces about $38,500. (2) A tax of one-twentieth of a mill on all taxable property in the state, which at present amounts to the sum of $57,000. (3) Fees of students, over $120,000. (4) And a special vote of the legislature to make up deficiences, amounting to a sum varying from $100,000 to $113,000. Of this endowment the medical faculty receives a sufficient share to enable her to do noble work. I am told that similar provisions, and even more liberal ones, are to be found in other states of the neighboring Union. And be it noted, the American can generally distinguish a bad from a good investment. You know well that similar conditions exist in countries on the continent of Europe.

You are familiar also with the fact that the grand old universities of the mother land support their medical faculties out of endowments which, though not under the control of the state, are yet public in so far as they have been left in a general way for educational purposes. And among our sister universities of Canada we can point to aid given to medical schools from funds subscribed for general educational purposes.

And now for the customary "few words to you students"—as though we had not been talking to you during the whole of this time—well, specially to you. I hope you will not feel too self-important at the acknowledgments we have made

of your importance—that but for the students our occupation as a university would be almost gone. If you do feel too much elated, let me remind you that at periods in the past, varying from one year to forty-five years, we were just as important as you—in that respect at least.

But lest you should still feel too much puffed up, I brought with me a little clipping from a newspaper. It is an anonymous letter, but I hope you will let me read it:

GOOD FURNISHED ROOMS FOR GENTLEMEN—every convenience; no students need apply. —— Church St.

I have suppressed the numerals lest you should be rushing to "apply," and I do not want to lose your company so soon; or you might be showing your want of discrimination by a serenade; and, gentlemen, perhaps that has been the trouble. Some wicked fellow or fellows, falsely representing themselves, or supposed to be, students, may have been blowing fog-horns under the windows at night, disturbing some poor sick fellow who had just gone to sleep, when they should themselves have been in bed, or burning what was pretended to be the ante-midnight oil. But I do not know who inserted that advertisement. I do not think any of our faculty did; we are only too glad to have you "apply," to us first, and then to your work. We are glad to see so many of you back again; glad too to see plenty of freshmen. Did I hear a second-years' man on the back benches interpolate the remark, "What is home without a baby?" If so, gentlemen of the first-year, it is because he considers what delight he himself gave last year to the present third-years' men; these in turn to the present "candidates for M.B.," and so on up to the time of the patriarchs behind me.

But seriously, gentlemen, we are glad to see you; and will you take kindly one or two little bits of advice that may be useful to you at the outset of your course, or in beginning a new year in it? Choose men of good, steady habits for your roommates and companions. If each one does this, where will the other fellows be? The logical deduction will be that they will have ceased to exist. There is one piece of advice which I may only venture to give personally, although I think I might count on the faculty also. Many of you are adrift, away from your homes. I know of two pretty good anchorages here in your university life. One is the Medical Students' Temperance League. If you at once place yourselves in a position to say, when asked, "I am bound in honor not to take even a friendly (?) glass of liquor," you will save yourselves a lot of bother and unrest. Your friends will soon know your resolve, and those of them who are worth anything will think none the less of you, whatever their own practice may be. Another good institution for you to join is the Medical Y.M.C.A. You will get no harm there. If you do not want to indulge in cant you need not do so; but if you are or should become a true Christian, you will be none the worse man—none the worse student. But an infinitely nobler and better thing than being merely a member of either of these societies—a thing far from incompatible with them, but not necessarily embraced in them—is to make it your chief object to please Him from whom you receive every blessing which you enjoy. Taking that principle for your guiding star, you will steer a straight, safe, and useful course.

I again say on behalf of this faculty that we hope for your regular and steady application to your work. We wish you all success, and will do what we can to help you to it.

In that part of his address which dealt with the subject of hygiene, Dr. Oldright also made a few extempore remarks on cholera as one of the questions of the day. Of the saving of money, as well as life, by advances in the medical sciences, we have an example in the present mode of destroying the germ wherever it can exist—in clothing, baggage, etc.—in contrast with the old so-called "shotgun" quarantine. A description was given of the "observation ship" at some of the stations. About 60 healthy persons at a time are taken off the infected ship; whilst they are passing through their bathrooms and on to the several staterooms assigned to them during their period of "observation," their clothing is being sterilized and is ready for them—drying immediately as soon as withdrawn from the superheated steam chamber. This was described in detail, and a reference made to that invented by Mr. Bernard McEvoy, of Toronto, which appears to be the best in use. One weak point appears to be that money handled and interchanged by persons affected with the

disease is not sterilized. The lecturer considered this a very probable mode of transmission of this disease, and not only so, but of such diseases as diphtheria and typhoid fever. Money taken from the hands of children affected with diphtheria might be sent to a fruit store for bananas or grapes, and might then be given to other children in change. It is a common thing to see persons counting bills and wetting their fingers on their tongue in so doing. These bills might have been handled shortly before by persons ill with diphtheria or typhoid. He considered a warning necessary as to these practices, and also in regard to eating fruit bought in stores without peeling.

Reference was also make to crude ideas regarding disinfection, and want of accuracy—guessing at the strength of disinfectants; and a haphazard sterilization by heat he compared to throwing a little strychnine on or around a mad dog instead of giving a dose which would be sure to kill.

Selections.

THE DANGERS OF EARTH BURIALS.—Sir Spencer Wells, in a late popular article, calls sharp attention to the dangers of earth burials in the case of those who have died from diseases caused by the more virulent of the pathogenic micro-organisms or toxines. He says: "Some persons doubt whether poisons can be carried through the earth for any considerable distance, but the fact has been experimentally proved as to the saline solutions. A salt of lithium was sown over a plot of land more than 150 yards distant from a well. Repeated examinations were made, and the eighteenth day it was proved that the solution had percolated through the soil into the well. Instances of contamination of water by animal impurities have long been too well known, and now the specific germs of infective diseases are known to propagate in the same way. Quite lately what is known as to typhoid and cholera has been proved as to consumption and bacillus of phthisis. In the botanic garden of Lyons, flower pots were filled with earth June 16th, 1891, and some earthworms were added in each pot with some of the sputa of tuberculosis patients and fragments of lung from their dead bodies. A month afterwards it was found that the earthworms contained tubercle bacilli in large numbers, and that guinea pigs inoculated with them soon died with genuine tuberculosis. Whatever the bacilli may be, whether tubercular, typhoid, or choleraic, in bodies buried in the earth, it is incontestable that earthworms, everywhere so numerous and active, may preserve the bacilli in their bodies during many months, and still live and lose none of their virulent properties and power of rapid germination or reproduction. These are the grounds on which we assume that bodies after death from cholera ought to be cremated, not buried. This becomes not only an additional argument in favor of cremation, but is a blow as well against the English Burial Reform movement, which favors a rapid dissolution of the body in basket caskets.—*Chicago Clinical Review.*

HEMORRHAGE FROM INTACT SKIN.—A. Deriabin, of Osa (*Vratch*, No. 31, 1892, p. 784), reports the case of a previously healthy girl, aged 18, in whom there suddenly appeared, without obvious cause, a profuse hemorrhage from the centre of the tip of the nose, the anterior surface of the forearms, and the volar aspect of the finger tips. From the skin of the nose the blood escaped in the form of a single fairly thick stream, while from the upper limbs it ran in the form of numberless thin jets and drops, as if "from a watering-can." Sometimes the blood spouted in a jet more than a foot high, at others it simply oozed, while now and then the bleeding stopped altogether. The phenomenon lasted, with short intermissions, nearly four hours, and was followed by all the typical symptoms of acute anæmia (pallor of the face and mucous membranes, vomiting, giddiness, prostration, etc.), the girl gradually recovering in about four days. Careful and repeated examinations failed to detect any lesion of the integuments, except, perhaps, over the tip of the nose, where there could be seen "a largish orifice of a cutaneous gland plugged with a blood clot." The latter disappeared in a few days, "leaving a permanent bright red spot." The thoracic organs were sound, menstruation normal. The hemorrhage did not recur up to the date of report (four months after the bleeding).—*Brit. Med. Journ.*

CANCER "CURES."—The announcement of an exposure by a committee of medical investigators of the Count Mattei cure for cancer is satisfactory. The faith in the alleged remedy was probably very shallow, and those who believed in it will be quite capable of disbelieving in the exposure. Evidence to those who believe in cancer "cures" by pretenders and dealers in secret remedies is very much thrown away. Even if one fraud is exposed, another will quickly take its place. The fresh spurt of energy in a newspaper announcement of a provincial remedy is probably to be explained on this principle. The public in these matters is willing to be deceived. It cannot await the slow development of regular medicine. The serious thing is that both in the Mattei business and in others medical men are involved whose professional qualification gives color to the pretension. It will be interesting to see how a certain journalist will take the Mattei exposure. The remedy was accorded a publicity by this gentleman to which, no doubt, it owed a certain amount of success. Credulity is not a very safe quality in a journalist, however well-meaning and benevolent; but the very least we can expect from him will be that he will give a cordial publicity to the exposure, exhibit some improvement in the critical faculty, and not lightly again lead the public into the indulgence of false hopes of impossible results from distilled water.—*London Lancet.*

A SUBSTITUTE FOR THE NASAL DOUCHE.—Dr. Bloebaum (*Med. Neuigkeiten*) no longer uses the nasal douche in removing crusts from the nasal cavity. He simply twists a lon and thin roll of cotton on to a knitting needle, introduces it into the nose, and withdraws the needle, leaving the cotton in the nose. A second and third are introduced thus, until the entire cavity is filled. Then one may begin with the opposite side and do likewise. In the course of a quarter of an hour the mucous membrane begins to secrete profusely, and if the cotton is then removed it will be found that it is saturated with secretions and the crusts lie on the rolls of cotton, thus leaving a nicely cleaned cavity for the application of the remedies. He never employs any watery solutions, but salves, which are rubbed into the nasal mucous membrane, or powders, which are insufflated.—*Lancet-Clinic.*

THE TREATMENT OF PNEUMONIA.—Dr. Boardman Reed goes very carefully over the literature of this subject and concludes: (1) That water locally applied, either by wet packs or in the form of baths, after the Brand method, is the most efficient single remedy or therapeutic measure for acute pneumonia. (2) That either veratrum viride or aconite can accomplish more than any other single drug in the first stage, and that the same is true of digitalis in the second stage. (3) That a combination of one of these cardiac sedatives with opium and diaphoretics affords not only a safe but an eminently successful internal treatment for the first stage of acute pneumonia, being capable of aborting the disease when its administration is begun near the onset and is repeated at short intervals day and night. (4) That venesection, though a most efficient means of treating sthenic forms of pneumonia, and, judiciously employed, considerably more successful than any merely expectant method, is no longer an indispensable resource in managing the disease, since other remedies have been found to accomplish the same results more surely and pleasantly.—*Therapeutic Gazette.*

THE TREATMENT OF ALOPECIA AREATA.—In a communication made to the Societé de Dermatologie et de Syphiligraphie (*Annales de Dermatologie et de Syphiligraphie*, No. 7, 1892), Raymond discusses some of the more recent methods of treatment employed for the cure of alopecia areata, and presents a method of his own which, it is claimed, shortens materially the time required to cure this often intractable malady. That form of the disease in which the loss of hair is confined to areas of moderate extent in the scalp and beard is regarded by the writer as quite distinct from that in which the hair fall is more or less general. As in many cases of the first variety a spontaneous cure not uncommonly occurs at the end of seven or eight months, methods of treatment which fail to bring about a return of the hair within a shorter period than this are regarded as useless. While admitting that the intra-dermic injections of solutions of sublimate, as practised by Moty,

and the application of vesicating liquids, are of real service in promoting the growth of the hair, yet these methods are painful or inconvenient, and thus difficult to carry out.

The treatment which the author employs consists in the application every morning of the following:

℞.—Hydrargyri bichloridi . . 50.
Tinct. cantharidis . . . . 25.
Bals. fioravanti[1] . . . . 50.
Eau de cologne . . . . 150.—M.

Frictions with this lotion are to be made over the entire scalp, and it is to be rubbed into the plaques with a stiff brush. In the evening the diseased patches are to be rubbed with the following lotion:

℞.—Acidi salicylici . . . . . 2.
B-Naphthol . . . . . 10.
Acid. acetici glacial. . . . 15.
Ol ricini . . . . . 100.—M.

The author insists upon a strict adherence to these formulæ, having found that the omission of any one of the constituents is followed by unsatisfactory results. In all the cases in which this treatment was employed, a return of the hair occurred within the first month, and the cure was complete at the end of two months. In those cases in which the alopecia was more or less general, the method gave no better results than the others employed.—*Univ. Med. Mag.*

TREATMENT OF RINGWORM.—Crawford Warren, F.R.C.S.I., in the *London Lancet*, suggests the following treatment for this troublesome affection: The affected region should first be washed with soap and warm water containing a little carbonate of soda, and then well dried. Acetic acid should then be thoroughly applied with a small brush, and on the lapse of about five minutes, when the acid will have soaked into the part, an ointment composed of sixty grains of chrysophanic acid to an ounce of lanolin should be rubbed in. This treatment should be carried out daily for such a period as may be necessary.—*Western Medical Reporter.*

1 This is officinal in the French Codex, and is essentially an alcoholic solution of various aromatics with balsams.

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TORONTO, NOVEMBER 1, 1892.

THE UNIVERSITY SENATE ELECTIONS.

Few there were in university circles who were not pleased to see the end of the recent contest in the elections for the Senate of the University of Toronto. It was a sad affair from beginning to end, and stirred up more bitterness than the university had ever known before. The strife among the graduates in medicine commenced early, and was kept up with almost relentless fury until the last. Those who organized the opposition to certain of the old members worked with tremendous determination, and left no stone unturned to attain their ends. The friends of those whom they wished to defeat took up the gauntlet with unbounded enthusiasm when they obtained some knowledge of the true inwardness of the attack.

I will not attempt to tell how much I regret many features of the contest. There is enough Irish in my nature to make me rather fond of a fight if it be fair and open; but a family fight, a war between those who should be friends, has always been to me a horror which I have ever striven to avoid. What dreadful thing happened in the Medical Faculty of the University of Toronto to divide its members into two factions engaged in an unholy war? I know not. There are mysteries connected with the whole wretched business which I have not solved—which I never expect to understand.

My chief aim in writing this article is to refer to some of the principal features in the so-called "new policy," and the relationship existing be-

tween arts and medicine in the university. I think that the efforts of a certain number to antagonize two faculties which ought to give each other a loyal support are greatly to be deplored. But the most unfortunate feature in the whole affair was the persistent and determined endeavor to ruin the Vice-Chancellor, as far as his university life was concerned. Who is Mr. Mulock, whom his enemies tried to destroy? He is the man who, as Vice-Chancellor for the past eleven years, has done more than any other living man to advance the interests of the University of Toronto, and, at the same time, the interests of higher general, as well as higher medical education. He managed the finances and husbanded the resources of the institution with a success that has been very gratifying to all who have had any intimate knowledge of such affairs. He ever endeavored to widen and broaden the great work of the university. He was to a large extent instrumental in bringing about the affiliations of the following institutions: Knox College, St. Michael's College, Wycliffe College, Victoria College, the Toronto College of Music, the College of Dental Surgeons, and the College of Pharmacy. It is easy to run over such a list, but it is difficult to conceive of the amount of work which these various undertakings have necessitated. His work in connection with the "federation scheme" alone cost many anxious weeks of earnest toil.

Although I knew Mr. Mulock intimately since boyhood, I had no adequate conception of the time he spent in university matters until I became a member of the Senate. I sometimes doubt if I know half now, as I have been learning something new in that direction from year to year. The greater portion of his work has been done for the Arts Faculty—the faculty that has furnished his most vindictive enemies. When the fire occurred in February, 1890, it had made but little headway before a special train was hurrying William Mulock from Ottawa to the scene of the disaster. He practically worked night and day, in conjunction with that magnificent veteran, Sir Daniel Wilson; and I have no doubt that his prompt actions, untrammelled as they were by any red-tapeism, did more than all other influences combined to bring to the university such large sums of money from the Government and from private individuals. He had made arrangements, shortly before the fire, to take a somewhat extended trip to Europe in the early summer of that year. In consequence of the increased work thrown on him, he gave up all ideas of going on any trip. I simply mention this incident (the particulars of which happen to be known to me, and probably not to three others in the world) to show how willing he was to make any sacrifice for his university, which he loved so well, without going on the housetops to proclaim the nature and extent of such sacrifice.

I noticed some statements in one of the recent "campaign" letters about financial matters, in which the writer endeavored to show that, as the Vice-Chancellor received a salary of $400, the $4,400 received in eleven years would go a good distance towards recouping him for the many thousands he had given to the university in many ways. Intimate as I have been with Mr. Mulock, I had no knowledge enabling me to contradict such statements until I heard him say, in reply to a question from Mr. John King at a public meeting of the graduates, that he had never taken a dollar of such moneys. I have since learned, incidentally, that he alone of the officials receives nothing while engaged in such work as counting ballots. I do not, however, attach much importance to this aspect of the assistance rendered by the Vice-Chancellor to the university, because I believe his time and energies, so freely and unselfishly given, mean more than his money, large though the amounts may be.

My most intimate knowledge of Mr. Mulock, as Vice-Chancellor, has been in connection with his work done for the Medical Faculty. It is impossible for me to do justice in my feeble words to the zeal and devotion which he ever showed to what he considered the strong right arm of the university. His prompt and generous action in sending, at his own expense, Prof. Ramsay Wright to Berlin to study Prof. Koch's methods of treating tuberculosis was simply an index of the great interest he took in the success of the Medical Faculty. In his dark days of a few months ago, when blind, unreasoning prejudice threatened to engulf him, his supposed favoritism towards this faculty was the instrument used by his enemies in their efforts

to destroy him. I will not now comment on this portion of Mr. Mulock's policy. I will concede, for the sake of argument, that it is open to criticism; I will admit that some friends of the faculty might consistently have objected to certain features of his policy; but how any fair-minded members of the Medical Faculty could join hands with the arts men in an endeavor to destroy the Vice-Chancellor, and those who had supported his views with reference to this same faculty, is to me incomprehensible.

It is well known that the Chancellor has recently taken an active part in the administration of university affairs. It is fortunate that a graduate so distinguished as Edward Blake has been able to devote a considerable portion of his time to university work. It is unfortunate, at the same time, that some of his friends should consider it their duty, while lauding him, to endeavor to pull down William Mulock. It must surely have been somewhat humiliating to the Chancellor to find, on his return from Ireland, that many of his expressions and utterances had been made use of in very questionable campaign literature by those who desired to ruin the Vice-Chancellor. Our Provincial University presents a grand field for all who are willing to work in her interests. It is big enough for all the Blakes and Mulocks that Canada can produce. Let it ever be our aim to encourage all such men to continue as active workers in a good cause.

I may be asked why I bring up these personal matters at this late date. I have done so because I ascertained during the recent contest that a large number of graduates in medicine wanted some light on this subject. Those brilliant letters which appeared in the Toronto press directed much attention towards Mr. Mulock and his attitude respecting the Medical Faculty; some wondered why so dangerous a man was allowed to run at large. I was strongly tempted to speak at that time, but I thought it was due to Mr. Mulock, as well as myself, that I should not publish an article such as this at a time when there could be the slightest suspicion that I was doing it for election purposes.

Now that the election contest has become a thing of the past, I sincerely trust that a large portion of the bitterness has departed with it. I regret exceedingly that such a man as Dr. John A. Mullin, of Hamilton, should have been dragged into the fight, and subjected to the humiliation of a defeat through no fault of his own. Of the other candidates on either side, I have nothing now to say. My great desire is to see a united faculty. We cannot afford to be divided. Our duty is to build up the Institution that has given us posts of honor. Personally, I desire to thank my fellow graduates for their kind and generous verdict, as shown by the recent "count."

A. H. WRIGHT.

THE MEDICAL COLLEGES.

The Toronto medical colleges were opened on Monday, Oct. 3rd. The old custom of having an opening address was adhered to in the three schools, This has never been the universal custom in Great Britain, and many who formerly had such formal openings have given them up. In Edinburgh they have nothing of the kind. Many of the London schools which formerly had such opening exercises have dropped them in recent years. We are rather fond of the old custom, and are glad to see it retained in Canada.

Dr. Oldright delivered the opening address for Toronto University Medical Faculty, which we are kindly permitted to publish in this issue. It will be found very interesting, not only to the friends of the university, but also to all practising physicians. The doctor's statistical references were very encouraging, as they showed that there had been a steady increase in the attendance, from year to year, since the re-establishment of the faculty. We understand, however, there is a slight falling off this year; and, as the five-year rule, which comes into force next year, is likely to diminish the number of young men entering upon the study of medicine, there is a prospect of a further decrease in numbers. In connection with this aspect of the position certain mathematical calculations of "Bystander," as published in the *Ontario Medical Journal*, may be considered rather interesting. Financially, the faculty has a small margin to work on, so far as the payments of salaries are concerned, and it is to be hoped that nothing will occur to make matters any worse in this respect than they are at present.

All things considered, we have every reason to believe that the prospects of the faculty are good, and that excellent work will be done by its members in the interests of higher medical education.

Dr. Powell delivered the opening address for Trinity Medical College on the afternoon of Oct. 3. The doctor received a warm reception from the students, with whom he is very popular. His address was said by those who were present to be an admirable one. Trinity's prospects are good, although we do not know that the numbers of this year will quite equal those of last session. It would be strange if there proved to be a falling off in both of the Toronto schools. The country, however, is not likely to suffer, as the supply of doctors at present is ample, and likely to remain so for many years.

The Woman's Medical College will have the largest number of *freshmen* that has thus far appeared in that institution. The members of the teaching staff are quite enthusiastic, and the prospects in every way are very bright. This college is doing excellent work, in a quiet, unassuming way, and we are glad to know that this is being properly appreciated.

THE PRACTITIONER AND THE UNIVERSITY OF TORONTO.

THE CANADIAN PRACTITIONER has always taken an active interest in matters pertaining to the University of Toronto. The head of its publishing firm is a distinguished graduate of the university, and no more worthy or loyal son of his *alma mater* lives to-day than Mr. J. E. Bryant, M.A. Many of the founders of the journal, men who freely and generously rendered much assistance to it in the early days of its history, are now on the professional staff of that institution; others, not connected with the staff, take a deep interest in her welfare. The connection of the editor with university work is sufficiently well known to make extended comment needless. Under such circumstances, it will create no surprise when we state that the aim of the journal is to take no sides in university politics, but simply to discuss matters of general interest from an impartial standpoint.

In the recent unfortunate and ill-advised contest it seemed best to adhere to our policy as above-mentioned, and do nothing to assist or injure either side. We think we carried this policy of silence too far in some respects, because certain broad questions arose which might have furnished legitimate subjects for discussion without even appearing to do any injustice to either side. However, if THE PRACTITIONER is to retain its high position as an independent journal, it is actually necessary that those connected with it should be above suspicion of any selfish motives in their editorial comments. We have been called the "university journal." We have no special objection to the title, if used in the proper sense; but we wish it to be distinctly understood that our highest aim is to be considered the independent and fearless mouthpiece of the medical profession of this country. In discussing matters pertaining to the University of Toronto, the various educational institutions, the Medical Council, and all questions affecting the interests of the general profession, we will ever keep this aim in view.

HAMILTON GENERAL HOSPITAL.

The members of the visiting staff in the Hamilton General Hospital are elected to their positions by a vote of the physicians and surgeons residing in Hamilton. A meeting of the profession of that city was held October 5th to elect the following: One physician, one surgeon, two outdoor surgeons, one oculist and aurist, one pathologist. For the position of physician there was a contest between Drs. Shaw and Cockburn, which resulted in the election of Dr. Shaw by a vote of 26 to 17, there being 3 blank ballots cast. Dr. White was elected surgeon without opposition. Dr. Osborne, oculist and aurist, and Dr. Cummings, pathologist, were elected to these positions without opposition. Three were nominated for the out-surgeons' positions, Drs. Lackner, Rennie and Aikins. The first two were elected.

DR. JOHN FERGUSON, Toronto, formerly of Welland, has been appointed Senator. The honorable gentleman will accept our congratulations. It is also reported that when Premier Abbott resigns the doctor will lead the Conservative party in the Senate.

Meeting of Medical Societies.

CANADIAN MEDICAL ASSOCIATION.

Twenty-fifth annual meeting, held in the Parliament Buildings, Ottawa, Wednesday, Sept. 21st, 1892.

The meeting was called to order at 10.30 a.m., Dr. Roddick, the retiring president, in the chair, who requested Dr. Bray, of Chatham, the president-elect, to take the chair.

The following nominating committee was then elected: Dr. J. A. Mullin, J. E. Graham, J. W. Campbell, A. Rousseau, F. W. Strange, R. W. Powell, H. H. Chown, T. G. Roddick, A. Taylor, L. C. Prevost, V. E. Edwards, C. O'Reilly, I. H. Cameron, J. Christie, G. L. Milne, the president and secretary.

The president invited the past presidents and secretarys on the platform, and then welcomed the delegates from the Ontario and Rideau Associations.

Dr. Mullin's notice of motion was then taken up. Dr. J. A. Mullin moved, seconded by Dr. J. E. White, which after a short discussion was carried: "That no proposal for honorary membership shall be presented to the association unless it shall have been previously submitted to a committee consisting of the president, secretary, and vice-presidents, who shall report to a meeting before the name is submitted for election."

Dr. Strange moved, and Dr. Powell seconded, "That only delegates and visitors from places outside the Dominion shall have the privilege of registration without a fee."—*Carried.*

The motion to engage a stenographer to report the proceedings of the association in order to have an official record was referred to a committee consisting of Drs. R. W. Powell, E. E. King, A. Rousseau, J. W. Campbell, W. H. B. Aikins, and H. S. Birkett.

Dr. Mullin spoke feelingly of the sad illness of Dr. Geo. Ross, of Montreal, an ex-president of the association, and moved, seconded by Dr. J. E. Graham, the following: "That this association has heard with deep regret of the illness of Dr. Geo. Ross, and beg to tender our sincere sympathy in his affliction."

The president stated that death had removed several prominent members during the year, and intimated that the Necrology Committee report in the matter.

It was suggested by Dr. Graham that the subject of cholera be discussed at the afternoon session; and that an invitation be sent to Hon. J. Carling and other Ministers of the Crown to be present.

AFTERNOON SESSION.

Dr. D. MacLean, of Detroit; Dr. Bulkley, of New York, delegate from the New York State Medical Society; and Dr. Kent, delegate from the American Medical Association, were made welcome and introduced to the meeting.

The president, Dr. Bray, then read his address. See page 433.

Dr. McPhedran, of Toronto, then read a paper on "Tubercular Cirrhosis of the Liver," which was discussed by Drs. Graham and F. W. Campbell.

Dr. H. P. Wright, of Ottawa, followed with a most excellent paper on "Appendicitis," which was discussed by the following gentlemen:

Dr. Bulkley referred to a case in his own person when twelve years of age; he was treated by Alonzo Clark. It was one of the earliest cases of opium treatment. The bowels were not permitted to operate in two weeks. The abscess opened into the bladder spontaneously, and he made a slow recovery.

Sir James Grant: I have been very much interested, indeed, in the excellent paper by Dr. Wright on "Appendicitis." I wish to bring before you to-day a case that I have now under observation, a gentleman who in his seventy-eighth year was attacked eight or nine days ago with very acute pains in the neighborhood of the appendix. I was under the impression that it was a case of acute inflammation in connection with the appendix or the tissues around it. I had attended him many years before for attacks of rheumatic gout, which generally ended in laying him up for weeks at a time. Had it been otherwise, I should have been inclined to follow the system of those who advocate early operation. Opiates were administered, and energetic dry cupping over the appendix. I informed him that I believed it was not at all unlikely that he would develop an attack of gout, as had been the case years before. On the eighth day after the abdominal trouble had almost disappeared, he had a moderately acute attack of gout. Some years ago I had occasion to write an article on the appendix, which was taken up later on by Dr. Howard, of Montreal. Since that time the treatment of appendicitis has been largely by operation, and now the abdominal cavity is regarded as a kind of gymnasium, and men think nothing of opening it to see what is the matter.

Dr. D. MacLean (Detroit): I listened with very great pleasure and interest to the practical and suggestive paper of Dr. Wright, and, if it were in my power to add anything in the way of definiteness or certainty to the problems which he has so ingeniously suggested, I should be very happy indeed; but I do not think that I am in a position to do so. I do not think that any person is as yet. After all, the operations in cases of appendicitis are of very recent origin, and I think it will be some time before we are able to lay down a complete set of rules for our guidance in those cases; they vary so much from each other. I think there is one point with regard to the management of appendicitis: we must take into consideration each individual case and judge of it on its own merits. We cannot lay down a general law that will apply to every case. Patients vary as to their age, as to their habits, as to their general condition, and in so many ways that while in one case it would be very easy to decide what course to pursue, in other cases it is a matter of the most extreme difficulty and the greatest responsibility. I may illustrate by one or two cases which have occurred to me quite recently. One was a case of a very well-known young gentleman in the city of Detroit, a man occupying a prominent position there, a gentleman whom I have known for twenty years at least, and who has always been very delicate—a kind of constitution that a surgeon would be very unlikely to select, if he could arrange the matter beforehand, as a subject for operation. This gentleman was in the woods

when he was taken ill, one hundred and fifty miles away from home—taken ill with all the characteristics of appendicitis. He got a special train and was brought home as soon as possible, and I saw him perhaps forty-eight hours after the commencement of the symptom.

He was then suffering very much pain and had a good deal of fever—about 101—a rapid pulse, very furred tongue, very sallow complexion, and altogether it looked as if it would take very little indeed to turn the scale against him. The indications for operation were clear, except in so far as there was no fluctuation. That would have settled the matter of course. There were tenderness and swelling, and all the characteristics. No doubt, if it had been an ordinary case brought to a public clinic or hospital, there would have been very little hesitation about performing an operation. But in this case, in view of the responsibility connected with it in many ways, and in view especially of the patient's condition, I did hesitate, and I made up my mind that I would wait anyway for twenty-four hours longer, getting everything ready in the house to operate providing the temperature went up, or other indications seemed to require it. I watched him very carefully indeed. In twenty-four hours his temperature had begun to go down. The swelling at the appendix had begun to disappear to some extent. His general condition was better, his pulse moved freely, the expression of his countenance improved, and I felt still further encouraged to wait. I did so, watching him very carefully until the symptoms gradually disappeared, and he got well without an operation. Now, there is one of those cases that illustrate the difficulty in deciding as to the operation. I have no doubt at all that if ten operating surgeons had seen that patient eight at the very least would have determined upon an operation, and yet the patient made a good recovery without it. A very few days afterwards I was called into the country to see a young man, aged 22, who had violent symptoms of appendicitis, and had been suffering for several days. I was called for the purpose of operating, as the surgeon in attendance was confident that nothing but an operation would have saved the patient's life. Sure enough, I found him with a high temperature, with well-marked swelling, and I believed I could detect fluctuation. At all events, the general symptoms were so urgent that the case did not seem to me to admit of any doubt whatever as to an operation, and I with very great facility found and perforated the appendix imbedded in a large cavity of exceedingly fœtid pus. I removed the appendix, washed out the cavity very thoroughly indeed, and left the cavity open with absorbent gauze so arranged as to make a good drain, and the patient recovered without any bad symptom. These are two characteristic cases illustrating the position that a surgeon very often finds himself in with regard to appendicitis. The question as to operation of the one case had gone so far, the last one I have described, that any doubt about it had really vanished. A few days before it might have been much more difficult to determine, although no doubt the patient would have had a better chance.

There is one point that I notice in Dr. Wright's paper—the question of the kind of drain to use. I have tried all kinds, and have settled down at last to gauze. I believe iodoform gauze makes the surest drain so long as the cavity is not too full to obstruct discharge. Just a few days ago I operated for a case of appendicitis which also elicited another point brought out in Dr. Wright's paper. All the symptoms of a rapid case of appendicitis were there, and I was called in for the purpose of operating. I acted on the patient within five minutes from the time I first saw him. The case had gone so far that the patient had been delirious, although the temperature was normal. One cannot always trust the thermometer. There was a patient in an advanced stage of appendicitis and yet his temperature was normal. Still his pulse was bad, and he had a low form of delirium. There was a discharge of a large quantity of pus. I washed out the cavity and made a good drainage, and the patient made a very rapid recovery. The point I wish to make is especially this, that I never saw the appendix. I passed my finger in and I found the abscess which was caused by the appendicitis was fenced off from the peritoneal cavity, and so I operated without touching the cavity, and I thought I should repress my desire for an additional specimen for my collection, and resist any tendency to look further for the appendix. He made a good recovery, as good as I have ever seen, and I do not suppose I shall ever have any further trouble with him. I do not think it is always necessary to find the appendix or remove it. There is one other point with regard to those cases—it is one of the most unfavorable and unpleasant to contemplate. I can illustrate it by a characteristic case which occurred in my own practice about a year ago. A young lady had recurrent attacks of pain caused by appendicitis. I had been called in once before, but the attack had passed off and she was well, though she had a delicate constitution. Another attack took place, and I was called in. The symptoms continued and became aggravated, although there was no very definite swelling. There was a high temperature, rapid pulse, pain, and general constitutional disturbance. In that case it was thought necessary to operate, and I did so. In that case we got down to the appendix, and with the utmost facility found the appendix swollen, inflamed, and adhering. I separated it very gently, of course. I do not think the whole operation lasted over five minutes. I closed it up, and congratulated myself on having struck a very satisfactory and easy case. She was a young lady about seventeen years of age. Unfortunately, she never did any good after the operation. She woke up in agony, and all the symptoms of collapse came on with tremendous rapidity, and in twelve hours she was dead. Unfortunately, I could not have a *post mortem*. Strange to say, on the same day, in New York, Dr. Bell, of that city, performed an exactly similar operation on a young lady of exactly the same age, and with exactly the same result. He could get no *post mortem* either. Now, perhaps on the other side of the abdominal cavity there was a secondary accumulation of pus which was not detected, and, if I find myself in a similar case hereafter, I think I shall make a careful exploration. If I did not find the pus which we had reason to believe existed somewhere, I would not have been satisfied with merely removing the appendix, which was done in this case with very great facility, but I

should have had a suspicion that there was something more, and try to find it. I think it is quite possible that in that case we might have found in the pelvis or somewhere a collection of pus which, if had it been removed, might have had the effect of saving the girl's life. Another point, and I will have done; it is a very nice subject, and once you get a surgeon started on it, it is hard to stop him. It is a subject on which the surgeon is mostly always wound up. One other point I want to make here, and that is the danger of the exploring needle or aspirator. I think we might almost say now that the aspirator has outlived its usefulness. I know very few cases in abdominal surgery where the aspirator is required. I have seen very sad cases, indeed, where great injury has been done by it. First, by the injury it involves; second, by sepsis; and, thirdly, by the incomplete diagnosis. There may be cases where you may empty an abscess by the aspirator successfully, but they are exceedingly rare. They generally leave enough behind to insure further trouble. At all events, as far as appendicitis is concerned, it is a paltering palliative and ineffectual mode of dealing with it. Either do one of two things—trust to nature and general treatment, or explore the abdomen and make a thorough, complete, and scientific operation.

Dr. Hill: This interesting discussion has opened my memory, and I recollect a case that I was attending at Brighton, England, years ago, of a young lady who was suffering from appendicitis. There was constipation, and when that was overcome she voided no less than eight plum-stones. She had eaten plum-jam eight weeks previously.

DISCUSSION ON CHOLERA.

The president, Dr. Bray: We have the Minister of Agriculture here, and I would ask now that Dr. Bryce come forward and open the discussion on cholera. The Hon. Mr. Carling does not wish to make any remarks now, but will do so afterwards.

Dr. Bryce said: Gentlemen, I have only to remind you that it is not six weeks yet since we had an official notice of cholera being present in Hamburg; that we have seen cholera brought from that point to England and to a United States port, endangering our own various localities to an extent which has created an extreme interest, which epidemics of cholera invariably have done since their first appearance here in 1832. In the limited time at my disposal, I shall only refer to two particular portions of the question of "What has this continent to do to protect itself against cholera?" You will remember that the International Conference is simply a meeting of executive officers, and that after the deliberation the president selected a commission of some seven gentlemen, four of whom made the eastern trip to inquire exactly into the border defences against the introduction of the disease to this continent. We started about the first of this month, and visited the Grosse Isle quarantine, and from thence, the day after the disease appeared in New York, we hurried as rapidly as possible to New York harbor, and there saw what all of you have read about, the detention of thousands of passengers in the middle of the harbor on infected ships. We went from that point to Boston, to Portland, to St. John, and Halifax, and back again to Philadelphia and Washington. I may state the general conclusions arrived at by the commission. I may say in brief that we have found this—that, assuming the disease to be brought to this continent in ships, there is a great lack at all points generally of provision for the removal of the healthy from infected ships. That is the very thing we found in New York harbor, and it seemed to us absolutely inhuman to see the large ocean ships, with hundreds of valuable lives upon them, lying there for nearly two weeks exposed every day, in most cases, to the sick, through the crew, stewards, etc., passing through the ship continually. The first thing we said was, "Get these people off the ships." It was finally done, but after great difficulty. At Boston the station had good places to take passengers to; but this brings up the next point, viz., the insufficiency of means to remove passengers from the infected ships.

At our own stations, Grosse Isle and Halifax, and others, this was noticed just as at New York, where there were thousands on the ships lying in the harbor. We likewise concluded that at all points where immigrants are received there must be means for immediate removal to islands, if islands are used for quarantine stations. The next danger is that at New York—it is not so now at Philadelphia, and I think we can say Philadelphia is safe—but at New York and Boston at the time of our visit, and at our own ports, there was a very great lack indeed of any modern facilities for rapidly and thoroughly disinfecting the baggage, which might have been infected before it was packed up and brought on board at Hamburg. That, then, is the next absolute necessity—that we must have modern disinfecting appliances wherewith rapidly and with certainty to destroy any germs in the baggage or effects of immigrants, and, next, that there shall be at these points such facilities as shall rapidly and completely disinfect the ship which may have been infected. Now, at no place on our whole tour from Grosse Isle to Washington did we find any sufficient apparatus for that particular part of the work. So you can see that there is in that direction a very grave question facing us—how much can our Government afford to spend, how much can the Federeral Government and the State Governments of the United States afford to spend for this purpose? What shall be its character, and, next, where shall they make their main point of defence? If we have not money to do this at more than two or three points, then it is possible to require all ships with passengers to come to those points. What is demanded is that here and in the United States, at those points, there shall be absolute defence against ingress. The other point I shall simply refer to because it belongs to the honorable gentleman's department—and it is a question which has arisen with the members of his own Cabinet, and with Provincial Governments and the various transit companies—what action shall our Government and the United States Government take with regard to bringing in immigrants next year? We know that next year we are to have a great world's fair on this continent, and we know there will be a large influx of a very doubtful class of immigrants from European countries. The immigration to the States last year was over seven hundred thousand. The Grand Trunk Railway brought in nearly forty

thousand, mostly from the port of New York, during the last eight months, and our other great railway has brought in some sixteen thousand by way of the St. Lawrence. This indicates that the danger to us is greater *via* New York than it is *via* the St. Lawrence, and it further indicates that the United States are not in any way exposed as much to us as we are to them. The question then arises, What can we, as medical men, viewing the situation broadly, recommend to all the health authorities with regard to next year? Our opinion is that of many gentlemen in the United States, that excepting, probably, immigration from Norway and Sweden and the British Islands, we shall urge that for a year at any rate—that is, next year—there shall be a complete embargo put upon that kind of immigration which comes to this country, especially through the port of Hamburg. You all know what it is; I need not describe it. If any of you have any doubt about it, let him look at the arrivals by the various ports of entry. If cholera once gets into New York and begins to spread, the people would disperse by twenty or thirty lines of railway, and coming into Buffalo by as many more, you can readily understand what we would be exposed to. The only fight we can make of a really effective character is the external fight. If after that we have to fight it in our individual towns and cities, I trust that with the work done in the present winter by local health organizations, cleaning up everywhere, and making the most positive health regulations necessary, we shall be comparatively free from danger if it gets through our frontier. I trust gentlemen will continue the discussion as I have indicated, and, if possible, formulate some broad conclusions that will be useful to ourselves as health officers, and I have no doubt of equal use to the Honorable Minister of Agriculture.

Dr. Rogers: What would Dr. Bryce consider as the most rapid and thorough way of disinfecting the baggage and the passengers on ships?

Dr. Bryce: Of course it is a question with a great many details in it, but I may say briefly this: it can be illustrated by one single reference on this continent. At New Orleans, as we all know, every year they suffered greatly from yellow fever, and especially from 1876 to 1878. The district during those years was semi-decimated. They introduced a very simple process of putting the infected material into a long cylinder which could be supplied with live steam under pressure rapidly driven in through pipes and kept there until everything in the inside was disinfected. It has been improved upon, and we have now, in the one at Grosse Isle, one of the most effective that I have seen on the continent. It is about nine feet long and four feet in diameter. It would only take a few square yards at a time, and that would take too long. That is, for the baggage itself. The other point is, that after the persons have been removed they are handled in this way at Philadelphia by appliances completed last week. They fitted up a steamer complete in its details so that they could run out close to the infected ships; then take on 50 or 60 passengers an hour and put them in large bath-rooms where they can be washed within an hour, and while washing have their clothing put in a superheated room where it can be disinfected. The next hour they take off as many more, and in that way disinfect the whole of the passengers. That is the steamer of "observation." Then they take the baggage by a *lighter* to the shore, and disinfect it in a superheated chamber there. The difficulty is they cannot, at Philadelphia or at New York, and we cannot at Grosse Isle yet, bring the ship alongside of a wharf where it could be cleaned. In order to clean the ship at Grosse Isle, Philadelphia, etc., they have adopted a plan of placing on a barge, or some sufficient vessel, large chambers in which sulphur dioxide can be rapidly distributed by means of fans. A large quantity of sulphur dioxide is sent through the ship. If that is done thoroughly and the ship stands under sulphur fumes for twenty-four hours, they have found in New Orleans, at all events, that it does disinfect the ship, not only in cases of smallpox, but also of yellow fever. That is, I think, an answer to the question.

Dr. Playter: I think we should consider hereafter, as medical practitioners, another aspect of the question. We know that there are yet other factors in the causation of all diseases of an infectious nature, and Sir Andrew Clarke has recently brought the question to a fine point in regard to tuberculosis. He said there were necessarily two factors in the causation of tubercles; one the bacillus, and the other the soil on which it grows. It is most desirable that everything should be done through quarantine to prevent the infection reaching this continent, but I think attention should be directed to the other essential more than it has been. Not that we should neglect the first, but the infection will escape the best quarantine and the best disinfection. There will be less danger in the future, but we should prepare for a certain amount of outbreaks at the best on this continent next summer. Our present facilities for instructing the people are, I think, insufficient, and a good deal might be done by way of enlightening the people in the way of the soil. We all admit that if the digestive canal is in a good condition there will be no infection, and the general functions of the body should be kept in a vigorous condition. It seems to me very clear that unless there is a want of acidity or, rather, alkaline conditions of the intestinal canal the cholera bacillus will not develop there. I think there should always be a thoroughly clean condition of the digestive organs.

Dr. F. W. Campbell: I do not think that, with all the good will that the Hon. Mr. Carling has, he will undertake to keep the digestive organs of the people of Canada in good order. That is a matter which comes under the cognizance of the provincial authorities. I should like to ask for information from those who are health officers if it is not a fact that the statistics give the following: That 70 per cent. of epidemics escape quarantine, and that 30 per cent. only are successful, even under the best system of quarantine?

(To be continued.)

DR. SENN, in a recent clinical lecture, expressed himself as being satisfied that catgut is the only suture necessary to approximate and maintain any fracture of the patella until union has taken place.—*Chicago Clinical Review.*

Book Reviews.

An American Text-Book of Surgery. Edited by William W. Keen, M.D., LL.D., and J. William White, M.D.,Ph.D. 1207 pp. Published by W. B. Saunders, 913 Walnut Street, Philadelphia. Toronto: J. A. Carveth & Co.

The book before us is one that we can recommend to both students and practitioners as embodying the latest improvements in the science and art of surgery. It is not perfect, no book can be; but it is up to date, and that means a great deal. When we con over the list of authors who have contributed to make this work a success, we can appreciate its value more fully, for each in their particular line are masters. Senn, Roswell Park, Nancrede, Francis J. Sheppard (the only Canadian honored with a department), J. William White, Phineas S. Conner, etc., are each and all of them at the head of their departments. We notice with a particular pleasure the illustrations, the majority of which are photo half-tone plates, and depict the lesions with that accuracy that only photographs can do. The old wood cuts, that only convey an erroneous impression, are nearly all superseded. The lithographs that are inserted, especially those of the bacteria, are exceedingly well executed. The chapter on surgical bacteriology is concise, yet thorough, and places the present status of this subject well before the reader. The chapter on "Ligation of Arteries" is exceedingly complete, and the illustrations, colored, are *fac similes* of those published by Maclise, possibly the best in existence of the arteries and veins. In some of the descriptions of operations, for instance, inguinal colotomy, the directions are vague and uncertain, which should not be in a book of this character; in fact, in this particular operation, if the technique were followed, the result would not be difficult to foretell. But, taking the book altogether, it is a great credit to the editors, and it embraces the whole subject of surgery tersely, and brings it up to the advances of to-day, and makes it equal to any publication of its kind from the continent of Europe. The typography and binding are each excellent, and the editor should be congratulated on having so good a publisher.

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Principles of Bacteriology. A practical manual for students and physicians. By A. C. Abbott, M.D., First Assistant, Laboratory of Hygiene, University of Pennsylvania. Philadelphia: Lea Bros. & Co. Toronto: J. A. Carveth & Co.

To a person desiring to learn the technique of bacteriological work, we cannot recommend any work which will be more suitable than the one before us. The fault which can be found with most of the works we have met with on this subject, is that they are two extended for the use of a student or practitioner beginning the subject and yet are not sufficiently large to allow of an exhaustive treatment. Dr. Abbott has shown great judgment in the selection and arrangement of his material. The work is divided into two parts: the first part being devoted to the general subject with a description of the methods of disinfection, cultivation, staining, etc., and the second to the practical application of these methods in the laboratory. The arrangement of this second portion we would especially commend. Certain types are selected which illustrate the various phases of the study, and these are worked out thoroughly, so that the student who follows it closely will be in a condition to carry forward the work for himself, although the book is meant primarily for practical students of the science. Medical practitioners generally could read the work with profit, especially the chapters on sterilization and disinfection, and those on tuberculosis and diphtheria in the second part.

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Notes on the Examination of the Sputum, Vomit, Fæces, Urine, and Blood. By Sidney Coupland, M.D., F.R.C.P. Second edition. London: H. K. Lewis; Toronto: J. A. Carveth & Co.

This little book contains minute directions for the examination of the above matters, and treats the subject very thoroughly. It is a great boon to the student.

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Essentials of Bacteriology. By M. V. Ball, M.D. Philadelphia: W. B. Saunders. Toronto: J. A. Carveth & Co.

This is one of the Question Compend Series, and, like its predecessors, is full of information that is abreast of the times. So great has been

the advancement in this particular branch that the literature is accumulating rapidly. This little volume puts all matters briefly, yet explicitly.

The Operative Treatment of Enlargement of the Prostate. By C. W. Mansell Moullin, M.A., M.D. Oxon., F.R.C.S. Toronto: J. A. Carveth & Co.

This volume contains three lectures delivered Mr. Moullin before the Royal College of Surgeons which are based on one hundred and forty cases of operations.

Personal.

DR. P. E. DOOLITTLE, Sherbourne street, is on a flying visit to England.

DR. D. ROSE has returned from England and resumed practice on Simcoe street.

DR. HUNTER, Bathurst street, is recovering from a very severe attack of typhoid fever.

DR. HUGH MCCORMACK (Tor. '92) has commenced practice at Chippewa Falls, Wisconsin.

DR. HUGH WATT (Vict. '88), of Victoria, B.C., has been elected a member of the Local Legislature, B.C., to represent Cariboo.

THE outbreak of smallpox in the Toronto General Hospital has attacked the house-staff doctors.

DR. FRANK P. COWAN, John street, has returned from his wedding trip. He has removed to the corner of John and Nelson streets.

DR. R. F. DWYER has been appointed lecturer on pathology in the Woman's Medical College.

ASST.-SURGEON C. O'GORMAN, 40th Northumberland Battalion of Infantry, assumes the rank of surgeon, having served ten years as assistant-surgeon.

DR. J. T. DUNCAN, coroner, Parliament street, had the misfortune to fall on the deck of the steamer on which he was returning from Europe and break his clavicle.

DR. C. T. CAMPBELL, London, vice-president College of Physicians and Surgeons, Ontario, was elected Grand Sire of the Independent Order of Oddfellows at its annual session at Portland, Oregon. This is the highest office in the gift of the order, and the first time it has gone outside the United States.

AT the organization meeting of the Toronto Clinical Society, held on October 19th, the following officers were elected for the ensuing year: Drs. J. A. Temple, president; L. McFarlane, vice-president; Edmund E. King, recording secretary; W. H. B. Aikins, corresponding secretary; G. Sterling Ryerson, treasurer. The executive committee: Drs. James Burns, J. E. Graham, Adam H. Wright, James F. W. Ross, and Albert A. Macdonald. The society has a charter membership of twenty-four. Its meetings will be held monthly.

Therapeutic Notes.

VIBURNUM PRUNIFOLIUM; ITS PHYSIOLOGIC ACTION AND THERAPEUTIC APPLICATIONS.—(*Medical News*, April 2, 1892.) By R. L. Payne, Jr., M.D., Lexington, N.C.—Dr. Payne, after careful experimental research on the action of this drug upon cold and warm-blooded animals, deduces the following conclusions: Black haw appears to exert no influence on consciousness or sensibility, but has a constant and marked effect upon the centres of motion. After its administration gradual paresis is first noticed, then complete paralysis of voluntary motion, and, finally, loss of all reflex power. In cold-blooded animals the pupils are contracted, but in warm-blooded animals no effect upon them is noticeable. It enfeebles the action of the heart, and under full doses there is a distinct lowering of the blood pressure, owing partly to increasing feebleness of the heart's action, and in part to a distinct action on the vaso-motor system. In lethal doses paralysis of the heart precedes the cessation of respiration. The heart is arrested in diastole. Dr. Payne concludes, from the result of his experiments, that viburnum paralyzes both the centres of voluntary motion and the reflex functions of the spinal cord, and thinks it destined to become an improved remedy in all diseases characterized by

increased excitability of the motor centres. An especial recommendation in such cases is the fact that it does not impair sensation or consciousness. The writer refers to a case of paralysis agitans, in which the prolonged use of moderate doses of this remedy produced marked diminution of the tremor. He thinks it especially useful, however, in certain forms of dysmenorrhœa, and in the prevention of abortion. The preparations recommended are the solid extract in doses of from five to ten grains, the fluid extract in doses varying from a drachm to half an ounce, and a decoction prepared from the bark of the fresh root.—*International Medical Magazine.*

PHENACETIN FOR SENILE VESICAL IRRITATION.—Dr. Traill Green has reported in the *University Medical Magazine* for June the successful use of this drug in cases of frequent micturition in the aged. Prompt relief was frequently obtained after a ten-grain dose taken at bedtime. The soothing action of the remedy seemed not to be limited to the nocturnal irritability, but was prolonged over upon the following day, so that the micturition intervals, both night and day, became nearly normal. In two of his cases there was a reduction from six and seven micturitions nightly to one only. One patient for a time did not need to get up at all during the night. No effect was reported as to the amount of urine secreted, and it did not appear to be necessary to use the phenacetin continuously in order to get the desired result. There were no effects from this use of the drug that would appear to contra-indicate it even among those patients who were enfeebled by their weight of years. The use of the drug is said not to be advisable in cases of prostatic enlargement.—*N. Y. Med. Jour.*

ANTIMONY IN DISEASES OF THE SKIN.—Jamieson and Douglas (*Edinburgh Medical Journal*, June, 1892) report further trials with antimony in the treatment of diseases of the skin. Two cases, psoriasis inveterata passing into general exfoliative dermatitis, and an exfoliative dermatitis tending to spread rapidly, were treated by the internal administration of tartarized antimony, a complete cure following. The first case had become progressively worse under other remedies, but began to improve upon the administration of one-eighth grain doses of tartarized antimony, and within three months a complete cure had taken place. In the second case the improvement was still more rapid. The authors conclude, from the observation of these cases, that "antimony softens skin, imparting increased succulence to the cells, augments insensible perspiration, improves the nutrition of the integument, diminishes hyperemia, and lessens the tendency to premature and excessive exfoliation. While advantageous in the early congestive stages of acute eczema, . . . it is contra-indicated during the period characterized by oozing, though it may be serviceable at a later stage, that of desquamation.—*Univ. Med. Mag.*

CHRONIC ECZEMA.—Dr. Lanara (*La Semaine medicale*, No. 41, 1892) recommends the following in the treatment of chronic eczema:

℞.—Alcoholic tinct. male fern . gms 30, ℥j.
Rectified alcohol . . . gms. 15, ℥iv.
Tincture of myrrh . . . gms. 4, ℥j.
Crude pulverized opium . gms. 4, ℥j.

Wash once a day with green soap the parts affected with the chronic eczema, removing all the crusts, then apply this preparation. It produces a slight irritation, which soon disappears. The vesicles cease to appear after ten or twenty days of this treatment, while the affection is cured in a varying length of time, according to the time it has lasted. Sometimes the eczema disappears in fifteen days.—*Cincinnati Lancet-Clinic.*

THE KEELEY CURE.—Dr. Keeley has taken great pains to keep his remedies a secret, but they have been secured and analyzed by competent chemists, and are now well known. The treatment consists in the use hypodermically four times a day of a solution which shows an analysis of:

℞.—Strychnia sulph . . . gr. ½.
Atropia . . . . . gr. ¼.
Acid boracic . . . . . gr. xv.
Aq. dest . . . . . oz. iv.

The formula of the tonic taken by the mouth is:

℞.—Ammon muriate . . . gr. j.
Aloin . . . . . gr. ij.
Tr. cinch. comp . . . oz. iij.
Aq. dest . . . . . oz. j.

M.S.—Teaspoonful every two hours while awake.

During the initial treatment—for the first one, two, or three days—much heavier injections of atropia are given, in combination with morphine. Any physician will know at a glance that the quantity of strychnine used is so minute, considering its relative potency, that it can have little effect in modifying the action of the atropia. The tonics support, to a degree, but they, too, have little influence in controlling the symptoms produced by that powerful drug.—*Times and Register.*

LEUCORRHŒA.—

℞.—Iron oxide, brown ("sub-carb.") } of each,
Powdered columbo . . . . } 0.10 gm.
Powdered cinnamon . . . . }
Powdered ergot . . . . . 0.25 gm.

One or two such powders daily.

—*Paillard.*

PILLS.

℞.—Ergot extract . . . . . 1.5 grams.
Iron sulphate . . } of each, 4 "
Potassium carbon. }
Glycyrrhiza extract . } of each a sufficient
Powdered glycyrrhiza } quantity.

Divide into 50 pills. Two or three every morning, noon, and evening.

—*Braun.*

CACHETS.

℞.—Calcium sulphide . . . 1 gram.

Dispense in 10 cachets. One mornings and evenings.

For little girls Bouchert recommends frequent lotions of lead-water or decoction of marshmallow leaves, and the injection of a 1:300 solution of corrosive sublimate.—*Med. and Surg. Reporter.*

FOR ACUTE CORYZA.—

℞.—Menthol . . . . . gr. iij.
Acid boric. pulv. . . . 3j.
Benzoini pulv. . } . aa 3jss.—M.
Bismuthi subnitrat. }

Ft. pulv.

S.—A pinch to be snuffed five or six times daily.—*L'Union Méd.—Med. News.*

FOR FISSURED NIPPLES.—

℞.—Olei olivæ . . . . . 3ss.
Ichthyol . . . . . 3ij.
Lanolini } aa . . . . 3ijss.—M.
Glycerini }

S.—Apply topically.

—OEHREN, *Journ. de Méd. de Paris.—Med. News.*

Miscellaneous.

ONTARIO MEDICAL COUNCIL EXAMINATION.—The following passed the recent supplemental examination of the Council:

Final.—W. H. Bourns, Addison; D. B. Bentley, Forest; P. M. Brown, Sarnia; J. G. Burrows, Napanee; G. R. Chevrier, Ottawa; J. H. Closson, Toronto; D. A. Clark, Agincourt: Geo. H. Cooke, Chesley; Geo. Clingan, Toronto; Bertha Dymond, Brantford; W. Earl, Winchester; I. J. Foley, Westport; J. C. Gibson, Milverton; W. C. R. Graham, Prescott; Henry Gear, Marsville; T. J. Gowan, Creemore: F. H. Heming, Toronto; John J. Harper, Rosemont; W. L. Holmes, Toronto; J. A. Hershey, Garrison Road; M. F. Lucas, Grimsby: A. W. Mair, Portage du Fort, Que.; A. L. Murphy, Rosemont; F. H. Moss, Toronto; D. A. McPherson, Crieff; E. F. McCullough, Everton: F. McConaghy, Richmond Hill; John McGinnis, Arva; F. A. Rosebrugh, Hamilton; A. Skipper, Hillsburg; W. W. Saulter, Toronto: R. W. Shaw, Hudson, Mich.; F. L. Switzer, Carleton Place; Julia Thomas, Toronto; W. G. Walker, Stratford.

Primary.—H. H. Alger, Colborne; Innis Bowie, Embro; W. H. Bourns, Addison; G. R. Chevrier, Ottawa; Chas. Carter, Toronto; I. J. Foley, Westport; A. B. Greenwood, Newmarket; W. C. R. Graham, Prescott; Robert King, Elder's Mills; M. F. Lucas, Toronto; L. W. Mair, Portage du Fort, Que.; F. A. Rosebrugh, Hamilton; F. S. Ruttan, Sydenham; H. A. Wardell, Dundas.

MR. GLADSTONE'S capacity for public business, for literary work of the highest character, and his physical endurance, with the weight of years upon him—he is now more than eighty-two—is a remarkable fact. There are reasons, however, for this state of things in his case. He was born into the world a vigorous infant, of excellent ancestry. He has never had any pecuniary anxiety. He has lived a sober and a godly life. These are the conditions which, if they do not insure longevity, and mental vigor with the long life, go very far toward promoting it.—*The Post-Graduate.*

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Original Communications.

ACCIDENTAL CONCEALED PUERPERAL HEMORRHAGE.*

BY ALBERT A. MACDONALD, M.D.

Medical men, by the nature of their calling, require to be always ready not only to respond to the urgent call, but they must be trained to act with promptitude and judgment. We cannot, like our brother practitioners of law, hear the case, and reserve our opinion until we have searched the authorities for precedents and opinions. We must carry our working library in our brains, and have there an active index for ready reference. It is true that in some surgical cases we have the opportunity of deliberately going into the history of the case, and of preparing our patient and ourselves for the moment of trial. We can study the subject, plan out our operation, and provide for what we deem to be every emergency, and, even then, we may find that perturbed nature has not followed her regular habit, but has led off in an entirely unexpected direction.

The demands made upon the strength and nerves of the surgeon when battling, perhaps, with deep adhesions, or the dreaded oozing which, in some instances, follows their separation, or when endeavoring to remove some morbid growth from a region closely surrounded by vital parts, are great; but I do not think they are to be compared to those made upon the resources of the obstetrician when he is brought, perhaps at the dead hour of the night, unaided, face to face with a desperate case where the life-blood seems to be flowing away before his eyes, and in spite of his best efforts.

It is of such cases that I would briefly speak to-night. I cannot take up all the ante-partum hemorrhages, but will make a commencement by alluding to "accidental" and "unavoidable" hemorrhages occurring during the last three months of pregnancy. These are so different in character and results from those happening at an earlier date that they would not bear discussion together.

It is now over a hundred years since Rigby made this artificial division of the hemorrhages of the last three months of pregnancy into "accidental" and "unavoidable," and though the terms have been assailed as unscientific, undesirable, and too absolute, we are not yet in possession of terms more suitable. It is my intention, first, to mention accidental concealed hemorrhage occurring during the last three months of gestation. By giving this clear definition, I exclude that form of hemorrhage which happens when the placental attachment is in the lower polar circle. In such cases, though the bleeding may at first be concealed, it soon finds its way out in much the same way that it does in placenta prævia lateralis. Fortunately for both patients and practitioners, this distressing accident is by no means common. Blundell, Churchill, Burns, Cazean, Meigs, Hodge, and Bedford are all authors of considerable note

*Read at a meeting of the Toronto Medical Society, Nov. 3, 1892.

who have acknowledged to having had no clinical experience in such cases. They mention and dismiss them with slight consideration. In the Dublin Lying-in Hospital but one such case is mentioned in an experience of 156,000 deliveries. At Guy's Hospital, in London, 22,498 consecutive labors happened with only three of this form of hemorrhage. Madame Boivin and Madame Lachapelle, who could unitedly lay claim to 42,000 labors, and who were acknowledged to be close observers, denied the possibility of this complication. Velpean more recently expressed his strong scepticism. He said: "How, indeed, can we consider that the blood which escapes from the uterine vessels in somewhat considerable quantities is capable of dilating beyond measure, and almost instantly, the cavity of the wound, instead of running between the gestative organ and its contents, so as to escape outwards, or of rupturing the membranes and becoming effused within their cavity?" I can conceive it possible, and know too well that it takes place.

Prior to 1860, according to the researches of Dr. Goodell (whom I may thank for a good deal of my information on this subject), there were only twenty-two published cases of this form of hemorrhage. In 1869, however, he reports one hundred and six cases. Doubtless, just as many cases happened in former years, but they were either unrecognized or unreported. On looking up the literature of the subject, I find authentic reports of innumerable cases, many of them being of extreme interest, as we know not the moment when such may fall to our lot.

During the later months of pregnancy hemorrhages depend upon detachment of the placenta. The blood flows from the ruptured utero-placental vessels, the weakest part of the vascular system. In giving the predisposing causes, I find that at the outset Robert Barnes affirms that "premature separation of the placenta rarely occurs in the young and the robust. It is most common in women about forty years of age who have borne many children, whose constitutions are worn by sickness and poverty, and whose tissues are therefore badly nourished, wanting in tone, tending to atrophy or degeneration." This statement, which, I have no doubt, is true, contrasts strangely with what I saw in my limited experience, for in my cases the patients were young, strong, and apparently in robust health; the placenta, however, presented a diseased condition. Certain impoverished conditions of the blood lend their indirect aid in the production of the hemorrhage, and such diseases as scarlet fever, variola, typhoid fever, albuminuria, acute atrophy of the liver, and leucocythæmia are potent factors. An exception is mentioned by Osler in the case described by J. C. Cameron, of Montreal, where a leukæmic patient went through three pregnancies without accident, and the children were all non-leukæmic. In this case both mother and grandmother suffered from symptoms strongly suggestive of leukæmia.

Towards the end of the period of gestation there is a great change in the relations which exist between the uterus and placenta; the adhesion becomes much less firm, and slight cause may give rise to detachment. If the placenta is situated in either the fundal or equatorial zone, the bleeding lies concealed, and we have only the general symptoms to guide our diagnosis.

We must not forget the changes in the muscular structure of the uterus itself. In the later months there is a great and rapid increase in muscular fibre, as well as in susceptibility for contraction. If such contraction be sudden or severe, we have a sufficient cause for partial detachment of the placenta—a small extravasation between uterus and placenta will cause further contraction. The placenta is loosened, hemorrhage takes place, and in this way the child is usually killed; and it, in turn, excites contraction and precipitates labor, and, by disturbing the balance between the external and internal layers of the muscular structure of the uterus, so upsets their relations with the vascular layer as to cause hemorrhage, for when contractions take place pressure is brought to bear on the intra-uterine vascular plexus; the blood must find somewhere to escape, and it is forced to some part of the placental disc. The utero-placental vessels, being the weakest part of the vascular system, are the first to yield, and so the bleeding may start.

This is in striking contrast to what may happen during the first half of pregnancy, when it is harder to produce the bleeding in this way.

and if it should happen, it may not be followed by such disastrous consequences.

Emotion may not only cause uterine contraction, but may strongly determine a flow of blood to the uterus, producing a sudden tension of vessels. This tension may find relief by bursting through the extremely delicate utero-placental vessels, causing an extravasation of blood between the uterus and placenta. Or extravasations may take place into the substance of the placenta, producing placental apoplexy, which will probably lead to detachment and hemorrhage. Direct violence, which is assigned as one of the most common causes, acts in a most obvious manner. Though the blow may not be directly over the placental site, it may act by *contre-coup*, throwing the uterine walls into active vibration, or causing violent contraction, and so separating the placenta. Pressure of the abdominal muscles may be a cause. Lifting, vomiting, straining at stool, coitus, coughing, standing at hard work, and many other causes have been assigned; but when we notice the many accidents which pregnant women may come through in safety, we are apt to think that perhaps the potency of violence as a cause may be exaggerated. At best, the causes are obscure.

In both of my cases, which have already been presented at meetings of this society, the patients complained, during the greater part of the pregnancy, of a continuous severe pain over a portion of the uterus which I afterwards learned corresponded with the placental site; and in both there were numerous foci of placental apoplexy, as well as portions which had undergone premature retrograde changes, which in my last case I have requested Dr. J. Caven to investigate and report fully to you to-night.

The symptoms of puerperal accidental concealed hemorrhage are acute pain over a portion only of the uterus. It is important to bear in mind both the circumscribed situation of the pain and its continuous cramp-like character, which conveys to the patient the idea of extreme tension. It is an early symptom, agonizing in character; it is soon associated with that group of symptoms which indicate collapse. The state of collapse arises partly from blood loss, and partly from shock to the nervous system. Shock is indicated by quickened, feeble pulse, pallor, and pinched expression, coldness of surface of the body, shallow respiration, restlessness, sighing, and retching. Labor pains are absent. If the abdominal walls are thin, local bulging of uterine surface may be noticed.

With these symptoms there is an absence of any appearance of blood from the genital tract, or, if the condition has lasted some time, oozing of blood serum may take place, the crassamentum being retained in its original situation. "Rupture of the membranes near the seat of the effusion, and a consequent appearance of blood in the liquor amnii, holds, as a symptom, the lowest rank in the order of frequency (Goodell); because should the os uteri be closed the membranes, however delicate, cannot, other things being equal, rupture any sooner than the uterine walls. For the sum of the resistance of the inclosed liquor amnii being equally distributed, exactly counterbalances the sum of the pressure exerted by the effusion."

The diagnosis is embarrassing at the outset. Intestinal colic may be suggested by the symptoms, but by careful examination we soon see that the symptoms are much too urgent—indeed, so urgent that the condition might readily be mistaken for rupture of the uterus; but uterine rupture is attended by retrocession of the presenting part and diminution in the size of the uterus when the fœtus has wholly or in part escaped from the organ, and the membranes are relaxed, or, more commonly, ruptured; whilst in concealed hemorrhage we have increased size of the uterus, and the membranes are entire. When the child is born, the placenta and black, hard clots usually come away with a rush. Prognosis in these cases—which often happens under conditions of debility or of disease, where there is little inherent power of resistance or of recuperation, and where the blood itself may have little tendency to clot—must always be extremely grave. "Death may occur in a few hours, even before delivery (Barnes); and sometimes the additional shock of delivery induces fatal prostration." Again, in spite of our best endeavors, a further continuance of hemorrhage after delivery of the child may extinguish what little hope remained. The child usually dies at an early stage. In 106 cases collected by Goodell, 54 mothers died,

and in 107 cases only six children survived. Treatment must be judicious. We may wait, watching our case to see what nature can do. Bearing in mind the great shock produced by dilatation and delivery, if we think our patient can stand it, we may allow more time for natural dilatation of the os. It has been stated (Tyhrsmith) "that owing to loss of blood there is no rigidity of the os uteri." I have not found it so. We must give close attention, with a view of assisting delivery before alarming symptoms set in. We know how little likelihood there is of saving the child; we must, therefore, bend our energies towards rescuing the mother from her perilous condition. There is no safety for the mother until after delivery; it must, therefore, be brought about speedily, whilst every effort is made at diminishing the bleeding. Dilatation of the os must be brought about by artificial means.

Rupture of the membranes is advised in a most dogmatic manner by a number of authors. Does such rupture meet the indications in any way? I think it does not! And when we consider how slight the experience of any one man can be, we may not be considered egotistical if we express our views against such men as Playfair, Barnes, Leishman, and many others of equal eminence. Rupture of the membranes cannot offer in itself any probability of checking and bleeding; in fact, it seems to me that it would offer increased facility for blood loss, whilst version, which is often demanded in the subsequent treatment, must be rendered more difficult by the evacuation of the liquor amnii.

How could rupture of the membranes tend to check hemorrhage? They answer, by reducing the bulk of the uterus, allowing it to contract, and so close the uterine sinuses. There is probably not a man in this room who has not seen a considerable amount of post-partum bleeding where the amount of contraction of the uterus, though not sufficient, was much more than we could expect to produce by rupture of the membranes, for we must bear in mind that, as a rule, the uterine contractions are not firm in these cases, but there is a striking absence of expulsive effort.

In my cases there was no diminution of the bleeding after rupture of membranes. I strongly advise that the membranes be not disturbed until we are ready to proceed furthur. Produce dilatation either by manual effort or by Barnes' dilators. The latter method has the advantage of acting as a tampon whilst the dilatation is proceeding. After dilatation, it must be decided whether to use forceps or to turn. If the amount of liquor amnii is large and the child small, turning may be rapidly effected, and is the best plan. We must be ready with the forceps in case of delay in delivery of the after-coming head. If the amount of the liquor amnii is not great, and if the child is large, I prefer to apply the forceps as soon as dilatation has advanced sufficiently. During the entire time stimulants must be administered—ergot may have some effect, given either by the mouth or by hypodermic.

An anæsthetic is necessary in order to quiet the patient, and to reduce the shock of the sudden delivery.

The danger may not terminate with delivery. In a patient already exsanguined, what at another time would be a trifling blood loss would now add greatly to the gravity of the case. Copious intra-uterine injections of hot water after having removed the placenta, may suffice. Equal parts of whiskey and water, or pure whiskey, injected freely into the uterine cavity usually control the bleeding; but the treatment after the delivery of the child resembles that of any other form of post-partum hemorrhage.

At the outset, it was my intention to take up unavoidable hemorrhage to-night also; but I feel that the time at my disposal has only enabled me to do scant justice to concealed puerperal accidental hemorrhage. I hope that our experience in such cases may be slight. Though it is an accident of extreme rarity, we require to be prepared for it in every way. Let me hope that the discussion may impress ready and efficient measures upon us.

A WORD FROM MR. MIKE ROBE.

Some call me a bacillus,
A germ I'm known to some;
I'm also dubbed spirillus,
And eke cacterium.
But I was a good Irishman—
Till Patrick banished snakes;
And since that time I've been Mike Robe,
The Prince of Stomach Aches!

—*N. Y. Recorder.*

Selections.

AMPUTATION OF RIGHT THIGH—LOWER THIRD—FOR TUBERCULOSIS OF ANKLE AND KNEE JOINTS.*

BY NICHOLAS SENN, M.D., PH.D.

GENTLEMEN,—I am very sorry indeed that the conditions presented in this, our new patient, although he is younger in years, render it necessary this morning to make a mutilating operation, for the same pathological conditions, but affecting two great joints instead of one. The case is an exceedingly interesting one from an etiological standpoint, illustrating the infectiousness of tuberculosis, the disease commencing in this instance in the same insidious manner as in the one which has just left the arena. A simple sprain of the ankle joint has been followed by an insidious tubercular affection which has destroyed the soft parts of the joint, and the probe demonstrated that it has invaded the articular ends of the bones forming the joint.

In fact, here is a case of so-called caries, which is in reality an effect of disease, not a disease *per se*. Caries of bone is produced by molecular destruction of bone tissue by granulations, and is, in ninety-nine out of a hundred cases, the result of a tubercular inflammation. I had decided to make a typical resection of the ankle joint when my attention was called to the knee joint, where I found destructive changes of a similar origin and character to the affection of the ankle joint. I believe that in this case there is absolutely no direct etiological connection between the ankle and the knee-joint affections, but the infection of both joints can, in all probability, be traced to the same primary focus. There is great danger that in this case, with two tubercular joints, the seat of secondary infection with pus microbes, the patient would soon become the victim of pulmonary tuberculosis, tubercular meningitis, or even of disseminated miliary tuberculosis, if the peripheral lesions were allowed to pursue their own course; hence it becomes necessary for us to sacrifice the lower limb and make the amputation through the thigh, eliminating by the same operation the two tubercular joints. There are only a few essential principles that become necessary to memorize and to carry into effect in amputating through any part of the upper or lower extremities. If you will remember to make the incision so as to bring the resulting scar away from pressure in wearing an artificial limb; to preserve the periosteum; and to amputate the principal nerve trunks at least an inch above the level of the incision through the soft parts, in order to prevent a common and very painful affection, neuroma; and under all circumstances to secure complete hæmostasis, you have all the essential rules that should guide you in making an amputation anywhere.

The operation that I am just about to make through the thigh may be regarded as a type for any amputation of the upper or lower extremities. In order to throw the scar away from where it will do harm, it will be necessary to make one long and one short flap; whether you take a long flap from the front, from the side, or from behind, is immaterial; you will take tissue where you can obtain it, and you will make the amputation as far away from the body as possible.

It makes my blood curdle, and my hair stand on end, when in the nineteenth century, during this progressive age, men are held up in courts of justice to answer a malpractice suit for having made a posterior long or a lateral flap; but old text-books are still revered by lawyers, but they are of little use to the surgeon. If called upon, under such circumstances, do not hesitate for a moment in supporting your colleague, whether he has made a long anterior or a long posterior flap. Rest assured that if he is a progressive man he has taken the flap from the region best adapted to serve as a covering for the stump.

Here, fortunately, we are able to make a long anterior flap, which is the ideal flap, of course, and, as you will notice, the flap by its own weight will seek to maintain its proper position, at the same time securing the best conditions for efficient drainage. If the knee joint had formed sinuses, and I had found the tissues over the anterior aspect of the knee joint in a less favorable condition for a flap than on the opposite sides, I

* An abstract of part of a Clinical Lecture delivered at the second annual meeting of the Association of Military Surgeons of the United States.

would have no hesitation in transgressing public opinion, and would make a long posterior and a short anterior flap. I should then come to the rescue of the flap, and, instead of relying too much on gravitation in keeping the flap in place, I would furnish it with proper mechanical support by suturing, splints, and careful bandaging, and establish drainage by making a buttonhole in the centre of its base.

I have carefully examined the cutaneous covering, and believe I can safely make an anterior flap, reaching down at least to the upper border of the patella, and I will therefore follow the rule that should never be violated, the same as in resection, of not removing, unnecessarily, healthy tissue, even in making a mutilating operation. We will use elastic constriction to control hemorrhage during the operation. Having made a long anterior and short posterior flap, I will divide the remaining soft tissues with a long knife, and make the incision a little conical, the apex of the cone directed upward. To provide a normal envelope for the sawn bone, I now make a circular incision through the periosteum about two inches below the circular incision through the muscles, and carefully reflect the cuff of the periosteum, because, as far as the immediate risks of traumatic infection are concerned, this material is of more importance than the remaining deep structures of the limb. I will now saw the bone through in such a way that the sawn surface will be on a higher level than the section through the soft tissues, in order to prevent undue prominence of the bones in the stump, so that the patient can wear an artificial limb with comfort. I clip away the edges of the bone with bone forceps, in order to protect the periosteal cuff against the harmful effect of linear pressure.

I wish to isolate the arteries separately, and in a second ligature, about one-third of an inch higher up, I shall include the accompanying veins, which will place the vessels in the best condition for closure by cicatrization in the shortest space of time. In ligating a large vessel, it is important always to use ligature material that will be removed by absorption. An absorbable ligature cannot be excelled, and I believe we have overdone the last few years in in the way of using silk ligatures, which to me have often become a source of great annoyance, and more so to my patients. A silk ligature that fails to become encysted in a suppurating wound is always a source of mischief. I have now applied one ligature; the next ligature shall include not only the artery, but also the accompanying veins. I am tying with a double ligature, the second one of which includes also the veins. The bloodless space in the artery, in four to seven days, becomes closed permanently by granulation tissue. We will now seek for additional vessels, and tie them before the constrictor is removed.

It is extremely important to remove at least an inch or two of the sciatic nerve in order to prevent the development of a painful neuroma, a frequent sequela of amputations unless neurectomy is practised. Such a complication seldem or never sets in if the nerve end does not remain in the scar of the amputation wound. We have ligated the large vessels, we have resected the nerve, and we will resort to surface compression to arrest unnecessary parenchymatous oozing.

Before we go any further, we will correct any possible mistake in the size of the flaps. You see, the anterior flap is about the right length, and falls down into its natural position without tension. I will compress the surface of the wound firmly with a gauze sponge for a number of minutes, after removal of Esmarch's constrictor, in order to prevent unnecessary loss of blood. In patients debilitated by such an extensive tubercular disease, as in this case, not a drop of blood should be wasted unnecessarily. The assistant should ligate any spurting points that may be seen when I remove the compress, after which compression is resumed if necessary.

I remember one case of amputation through the leg where I almost despaired of controlling the parenchymatous oozing; the more I ligated, the more it bled; surface pressure and douches of boiling water were of little avail. After a long siege by surface pressure, with irrigation of hot water, we resorted to permanent compression by compress bandage, and finally succeeded in controlling the hemorrhage. I found in the tissues subjected to microscopic examination numerous encapsulated trichina that had wrought serious changes in the structure of the vessels and other tissues, and I am firmly convinced that in many of these cases you will find some

tissue lesions that will account satisfactorily for the obstinancy of the parenchymatous oozing. Remember the important tissues concerned on the line of section made through the limb. I have attended to the nerve, I have ligated the arteries, I have ligated at the same time the large veins; the parenchymatous oozing has ceased; now I wish to protect as far as I can the most important anatomical constituents of the line of section, the vessels and the medullary tissue, against the deleterious effects of suppuration, should such a complication arise in this case. In debilitated patients, and where time permits, I bury the ligated vessels with the buried catgut suture, as an extra precaution against secondary hemorrhage should suppuration occur. I now wish to protect that most sensitive of all structures to infection with pus microbe, the medullary tissue, by closing the canal by the use of the periosteal flap. It is fortunate for pathologists and surgeons that we are now in possession, as a nation, of the rich pathological collection of the necrosed bone from amputated stumps harvested during the late war of the rebellion. Such specimens after amputation are now rarely obtained, owing to the effective wound treatment that is now almost universally adopted. It is this traumatic osteomyelitis, which so frequently resulted in pyæmia and death; it is this osteomyelitis that yielded the large collection of specimens of necrosed bone. Preservation of the periosteum, and securing and maintaining an aseptic condition of the wound, furnish the most reliable safeguards against osteomyelitis, necrosis, and pyæmia, After an amputation through the thigh, there is a tendency for the bone to project through the soft parts, giving a painful and often useless stump, and often making re-amputation necessary. This follows either in consequence of the flaps having been made short, or as the result of violent and prolonged course of contractions of muscles whose lower attachment has been sacrificed Our flaps are of proper length, and we shall guard against the ill effects of muscular contractions by providing a temporary point of anchorage by means of a second row of buried sutures; this attachment will support the muscles below for three or four weeks, and be removed spontaneously by inactivity and pressure atrophy.

We are dealing with a very large wound; there will be considerable primary wound secretion, and as the hospital surroundings here are not the very best, and the patient is debilitated by disease, it is necessary to establish tubular drainage. Here I will drain by making a small buttonhole in the middle of the base of the posterior flap. I prefer to do this rather than drain from the angles of the wound, as I desire to obtain primary healing of the amputation wound throughout; at the same time the drainage will be at the most dependent point, where it will prove most effective. The flaps will be stitched in the usual manner, and the operation closed throughout. In the dressing it is important to guard still further against subsequent parenchymatous oozing during the period of reaction by making the antiseptic hygroscopic dressing copious, so that it will not only prove useful in absorbing and disinfecting the primary wound secretions, but will prove beneficial by exerting a continuous equable elastic compression, which not only guards against hemorrhage, but constitutes at the same time the best known means in securing accurate apposition between the wound surfaces. The stump will be supported by a hollow posterior splint, and will be kept in an elevated position for at least twelve hours.—*Chicago Clinical Review.*

VARICOCELE.

CLINICAL LECTURE DELIVERED AT FREEDMEN'S HOSPITAL

BY N. F. GRAHAM, M.D.,

Professor of Surgery in the Medical Department of Howard University, Washington, D.C.

GENTLEMEN,—We have here this evening two cases of well-marked varicocele, on which I propose to operate with the hope of securing a radical cure. Varicocele is simply a varicosity of the spermatic and pampiniform veins of the spermatic cord, which have become elongated, tortuous, dilated, and thickened. This condition, which I can hardly look on as a disease, is not commonly met with in the very young, or in persons advanced in years, but is not by any means rare during early manhood and the prime of life. The exciting causes of the development of this condition of the veins are chiefly due to gravity and mechanical obstruction to the return of the blood through the spermatic veins. This obstruction may be so persistent

as to cause very great enlargement and lengthening of the veins, so that they pass or drop below the testicle and reach down the thigh a number of inches. Such an exaggeration is not common. Ordinarily, the mass is of moderate size, not accompanied by pain, and having no effect on the virile powers of the individual. However, cases are met with in which the pain is quite severe, and in many instances the mental worry is considerable, and in some excessive. Varicocele of the left side is very much more commonly met with than that of the right, the proportion being about seven per cent. for the right and ninety-three for the left side, whilst about nine per cent. of all cases have varicocele of both sides. The reasons given for the greater frequency of the affection on the left side are, first, the greater length of the vein, and therefore a longer and heavier column of blood to support on that side; and, second, that the left spermatic vein opens into the left renal vein at right angles to that vessel and to its blood current. The veins on both sides are probably equally pressed upon at the inguinal canals by the abdominal muscles during exertion or in coughing. The left vein is also pressed upon by the loaded colon, which may act as an etiological factor. The right vein is shorter, and it opens into the inferior vena cava, not at right angles, as does the left, but more in the direction of the blood current. The length of the left vein and the manner of its connection with the renal vein are, I believe, the most active factors in causing the varicosity. The absence of valves in the left spermatic vein has not been so fully demonstrated as to warrant the opinion that that is an important cause.

Varicocele is most common during the period of the greatest activity of the sexual organs—from fifteen to thirty-five. At this period of life a freer supply of blood is necessary for the performance of the sexual functions. Constipation, much standing, and any violent exertion which calls into play the abdominal muscles predispose to the disease. Owing to the slowness of development and the absence of pain, the veins may become considerably enlarged before the change is noticed, but later on there is a sense of weight, dragging, and uneasiness in the testicle and cord. The dragging pain extends up the loin, and this position is aggravated by long standing, or by very active muscular exertion. As you see in this case, there is a flaccid condition of the scrotum, and the testicle hangs lower than normal. In this first case you can see the veins, like whipcords, occupying the region of the spermatic cord, and in this other case the dilated and tortuous veins descend below the testicle. In the case before us the dilated veins can be easily seen and felt, are soft and elastic to the touch, and their feel is usually compared to a bag of earthworms. When the patient lies down the veins diminish in size, and fill up with great rapidity when the erect position is assumed. I ask this patient with the greatly enlarged veins to cough, and on placing my hand over the scrotum I can feel an impulse transmitted to my fingers, but not so marked as we get in hernia. The majority of the cases of varicocele met with in practice are not large or painful. Yet you will rarely meet a person suffering with this condition to whom it is not a source of great mental worry and anxiety, with the constant fear before him that he may become impotent at some time. Indeed, a large number who come under my observation fancy that the virile power is not as active as it should be, and for that reason alone (in the main, a fancy) they seek the advice of a physician. Many of them fall into the hands of charlatans, who seek to confirm their fears in order to extort money.

The diagnosis of varicocele ought to be made without difficulty, yet it has been mistaken for hernia. The reliable test in arriving at a diagnosis is to make the patient assume the recumbent position, when the veins will empty themselves, or the hernia, if reducible, will recede; then press the finger firmly over the inguinal canal while the erect position is assumed. If it is a varicocele, the veins will speedily fill; if a hernia, the tumor will be retained by the finger pressure. The history of a hydrocele is that the scrotum commences to fill from the bottom; is smooth and elastic; palpation develops fluctuation, and it is translucent, and does not diminish when the patient lies down.

The treatment of varicocele consists of the palliative measures and the operation for the radical cure. The former plan includes the constant wearing of a suspensory bandage.

The parts should not be kept too warm, for warmth and moisture relax and take away the support of the scrotum from the dilated veins. Cold in the form of a douche to the genitals night and morning, solutions of muriate of ammonia, hamamelis, etc., have been used with benefit. The bowels should be kept open in order to avoid loading of the colon, and, if the general health is defective, tonics should be administered.

When these measures are ineffectual it becomes necessary to operate, as in the cases before us. There are two methods generally adopted by surgeons—the subcutaneous ligature, a plan first suggested and put into practice by Ricord, but so improved on by Dr. Keyes that it is known as Keyes' method; also the incision and ligature by what is known as the open method. I rarely employ the latter, and only when I fail after repeated efforts by the concealed ligature. I do not confine myself to Keyes' plan, but very often adopt the plan so long successfully practised by the late Dr. Agnew, of Philadelphia.

We are now prepared to operate. The scrotum is shaved, and made aseptic by careful washing and a sublimate douche. I now throw fifteen minims of a four-per-cent. solution of cocaine into the upper part of the scrotum in the field of the operation. I have here, as you see, two of Keyes' varicocele needles; one threaded with strong twisted silk, which is not very thick, but has been tested, and is capable of bearing all the strain necessary to very firmly constrict the veins. I find the vas deferens located in the posterior part of the cord, near the base of the attachment of the scrotum to the perineum, which can be easily recognized by its hardness to the touch, and the manner in which it jumps from under the thumb and finger when squeezed. I separate the vas deferens from the mass of veins, carrying it backward. With it is carried the artery. They are now resting on the ball of the finger and thumb, whilst the terminal portion of the finger firmly compresses the walls of the scrotum. Anterior to and close to the nails, I now introduce the threaded needle, passing it completely through both walls of the scrotum from front to back, and then leave it in the hands of the assistant. I now take the unthreaded needle and introduce it at the same point as the first, and now that its point is well within the dartos it is carefully worked between the dartos and veins, and so passed around the mass. I make its point emerge at opening of exit made by the threaded needle. Now the thread is taken out of the eye of the first needle, and the second is threaded with it and the needle withdrawn. It is clear that the mass of veins is now encircled with the thread loop, which I simply tie with a single instead of the friction knot, and cut off both ends short. By separating the integument of the scrotum the entire loop becomes subcutaneous, and, if no germs have been carried in, the thread will become encapsuled, and no harm will result. It is not an infrequent practice with me to cut only one thread, leaving the other hanging out, which enables the loop to be removed in from ten to fifteen days; a plan which is very satisfactory, indeed, and, as a rule, the patient is better satisfied if the entire thread is removed in the course of a few days. The scrotum will be now washed with a sublimate solution and wrapped in gauze—iodoform or bichloride gauze will answer equally well. The patient is to be placed in bed, where he will remain for a couple of days, after which he can move about, and can resume his work in ten or twelve days.

I will now operate on the next patient by the plan of Dr. Agnew, one which I like myself very much. The scrotum is prepared as for the other operation, and the field injected with cocaine. I now take this steel pin, two and a half inches in length, having a large head, and thrust it through both walls of the scrotum from behind forward, of course taking the same precaution as I did in the first operation to isolate the vas deferens and artery. Now, with the Keyes needle threaded with a strong silk thread, which is carried through the eye of the needle to its centre, I enter the scrotum at the point of exit of the pin, and, when within the dartos, carry the point round over the veins and bring it out at the same point entered by the pin. I now pull forward the loop over my finger, and withdraw the needle, unthreading it. The loop is slipped over the head of the pin, and the free ends of the thread tied over the point and drawn tightly enough to compress the veins. The point of the pin is now snipped off

with a pair of wire nippers, a small disinfected cork placed on the end, and the scrotum covered with gauze. The patient will now be placed in bed, where he will remain for a couple of days, after which he can get up and move about his room. At the end of eight days the pin will be pulled out, when the loop can be very easily withdrawn. This plan has advantages over any other in which the ligature is removed subsequent to the operation, for the moment the pin is taken out the knot is freed, and the thread is easily withdrawn. Considerable hardness remains for some time at the seat of the ligature, which is the cause of some solicitude to the patient, but it soon disappears completely in cases in which the thread has been removed; but often it is slow of disappearance when the thread is left in, as by the method first adopted by me to-night. In the case of nervous, anxious, inquiring subjects, I yet prefer the pin-and-thread method, for it saves explanations and increases the confidence of the patient.—*Internat. Med. Magazine.*

CARCINOMA OF THE SIGMOID FLEXURE, INTUSSUSCEPTION, AND INTESTINAL OBSTRUCTION: OPERATION, REDUCTION OF THE INTUSSUSCEPTION AND RESECTION OF INTESTINE: RECOVERY.*

BY FRANK HARTLEY, M.D.

J.S., domestic, aged thirty-two years, Norway, single. Admitted to the New York Cancer Hospital, March 27, 1892.

Condition: Anæmic, emaciated. Her previous health has been good. Menstruation regular. Her family history is not known to her. Her present trouble began with diarrhœa on March 1, 1892, at which time and subsequently to it she lost a considerable quantity of blood. She has had severe attacks of pain in the abdomen up to the present time, with an absolute constipation during the past week.

March 27th: Examination without ether revealed a large tumor within the rectum, easily movable, and suggesting a carcinoma with intussusception.

28th: Under ether the diagnosis was confirmed by bringing the tumor through the anus. It was found to be a large sloughy mass, hard at its base, completely surrounding the intestine, and with a lumen in its centre admitting with difficulty the forefinger.

This was thoroughly disinfected with bichloride-of-mercury solution (1 to 1,000), and dusted with iodoform powder.

Iodoform gauze was then carefully packed around and into all crevices in the tumor. The mass was then reduced within the anus.

30th—Operation: Trendelenburg's posture. Median incision eight inches in length. Small intestine removed to the abdomen from the pelvis. The tumor was found to be within the rectum, and surrounded by a double invagination or intussusception. The outer or second intussusception was reduced with slight difficulty. This, however, did not allow the tumor to be brought into the abdomen proper. With a partial reduction of the first intussusception, however, it could be brought above the iliac fossa.

Considering the condition of affairs—a tumor within the gut with an intussusception—the natural method of operation seemed to be that recommended by Mounsell, of Melbourne, Australia, for in this way the sloughy mass could be reached, cut loose, and delivered without any possible contamination of the peritoneal cavity. Consequently, a long incision three inches in length was made over the lower segment entering the intestine; intussuscipiens, the tumor, and intussusceptum were delivered through this opening after protecting the mass with additional gauze.

The intussusceptum was then divided transversely a little below its neck. The divided ends were held in position until the arteries in the mesenteric border were securely ligated. Silk sutures were then passed through all coats of the intestine as they were held in position, according to Mounsell's recommendation, and tied.

One or two catgut ligatures were placed in the mucous membrane alone where it gaped. The fold was then reduced, and a Lembert suture was carried around the intestine above the larger and deeper sutures. After this the longitudinal incision in the lower segment was sutured by a few stitches of silk in the mucous

*Read before the New York Surgical Society.

membrane, and a Lembert suture in the serosa and sub-mucosa. The cavity was wiped out with a sponge, The abdominal incision was closed with silkworm gut, rubber tissue applied over line of incision, and a bichloride dressing applied. After operation the course was uneventful, temperature having never arisen above 100°, or the pulse above 96.

April 7th: Primary union in the abdominal wound.

8th: Semi-fluid movement following an enema.

11th: Small movement.

12th: Large number of scybala removed. Daily removal of these until the 14th of April.

May 1st: Has had daily voluntary movements. Sat up.

7th: Up and about the ward.

This case is of interest because of the happy recovery after enterectomy for carcinoma of the intestine combined with a double invagination, as well as being the first case of this kind performed here. To me it seems to be the method for enterectomy, especially in such cases as the above. The rapidity with which it can be done and the easy command one has over the hemorrhage seem to be the two great points in its favor.—*N. Y. Med. Jour.*

CROUPOUS PNEUMONIA CAN BE ABORTED.—F. Gundrum, M.D., Escondido, Cal., writing to *The Medical News* of Oct. 22, says: SIR,—I read with considerable interest the article by Thomas J. Mays, M.D., in *The Medical News*, Sept 24, 1892, page 348, headed, "Can Croupous Pneunomia be Aborted?" My experience goes to show that this question can be answered most positively in the affirmative. I could give many more cases than the one here reported, but deem it unnecessary to occupy your valuable space with repetitions. About the middle of April, 1872, I was called to see Miss M. E., nineteen years old, a rather tall, slim blonde, one of a number of dining-room girls at the Revere House, in Iona, Mich. She was pretty sick for two weeks with a rather severe remittent fever, which left her much prostrated. On the sixteenth day I discharged her, leaving a prescription for a good stiff tonic, stock ale, and a generous diet. Two days later, at about 6 p.m., I was sent for in great haste to see my patient again. The evening before, while the proprietor and his family were at supper, the girl got out of her bed, slipped on a light wrapper, and sat in a rocking chair, in order to agreeably surprise her friends when they returned. The evening was cold and blustery, and she became much chilled before she went back to bed. At 5 a.m. on the following morning she was seized with a severe chill. The proprietor of the hotel, having been an army nurse, set to work to get her out of this condition. She was quite ill all day, and in this condition I found her. She was pillowed up in bed, lying on her back, as she could breathe better in that position; her face, but more especially her cheeks, were livid; the finger-nails were inclined to look bluish. The respirations were 46, the pulse 130, and the temperature 106°. A short, hacking, "choky" cough was present. On physical examination, nearly the whole of the left lung was found to be involved in a process of acute inflammation. The crepitant râle could be heard over nearly the entire lung posteriorly. I knew well enough that the patient could not live in the debilitated condition in which she then was, if the disease followed its usual course; so the only chance was to abort the disease, if such a thing were possible. Fortunately, I had received, a few days previously, Niemyer's "Practice" and, more fortunately, I had read the article on pneumonia, from which, for the first time, I had learned of the idea that pneumonia might be aborted by cold applications to the chest.

With the consent of the patient and her friends, I was allowed to try the "new treatment." A large tub was obtained, filled half full of "chunks" of ice, and then nearly filled with water. This was stirred rapidly until the temperature of the water came down to 50° F. A large double woollen blanket was wrung out of this water, and the patient was then wrapped in it from the chin to the toes. It was changed every thirty minutes until the temperature reached 104°, when the cold pack was not allowed to come below the middle of the thighs. At 1 a.m. the temperature fell to 102°, when only the chest and upper part of the abdomen were enveloped; by 6 a.m. the thermometer stood at 98°, the pulse at 60, and the respirations at 16, with the face pale. The patient was then thoroughly rubbed, put into warmed blankets, hot bottles applied to her feet, and a

half-ounce of brandy administered. She fell into a quiet sleep. At 10 a.m. I examined the chest again, and found no trace of the crepitant râle, and only a few moist râ at the base of the left lung. She received also four drops of the fluid extract of viratrum viride; then two drops every hour for four doses; then one drop until 4 a.m., when it was discontinued, it having lowered the pulse sufficiently. The patient made a rapid recovery. In regard to veratrum viride, I may say that I ceased using it many years ago, as it has no particular effect in controlling the temperature. In fact, the highest temperature I ever observed in acute lobar pneumonia was in the case of a young man, in which the temperature ranged between 104° and 106.5° for ten days, notwithstanding the fact that the pulse was never allowed to go over 70 or under 60 by the use of veratrum viride. I consider the application of cold to the chest a great, if not absolutely the greatest, therapeutic agent that we have in acute lobar pneumonia; but for various reasons—prejudice of patients or their friends, or the weak-kneedness of the doctor—few use it.

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THE CÆSAREAN SECTION IN PLACENTA PRÆVIA.—Dr. W. H. Ford (*American Gynecological Journal*) says: The dangers of placenta prævia, as well to the mother as to the child, are due to the development of the placenta upon the lower segment, *and* to the *canalization* of this segment during labor. While the first of these conditions cannot be avoided, the second should not be permitted in placenta prævia totalis, or partialis. Delivery should be by Cæsarean section. In placenta prævia marginalis, if the circumstances were favorable, the os easily dilatable, the condition of the mother and child good, the head presenting or capable of being readily brought to engage, and the hemorrhage arrested or moderate, it would be well to follow the method of intra-uterine and vaginal tamponade, and deliver by forceps if the child should be in danger. But if the os were rigid, the hemorrhage profuse, the presentation lateral, the cord prolapse and not reducible, or the *fœtus evidently suffering*, I would have immediate recourse to the Cæsarean section. The Cæsarean should be performed as soon as the diagnosis is established and the condition of the mother permits, to the exclusion of all other methods, as an elective and primary operation, and in all cases of *placenta prævia totalis* and *partialis*, and in placenta prævia *marginalis*, as soon as the conditions warranting it have been satisfactorily determined. In the two graver forms of placenta prævia, the Cæsarean section should be practised as a prophylactic measure, in place of any attempt to deliver by the natural passages, after the first hemorrhage. In cases where hemorrhage is late or sets in only as labor begins, and where, consequently, the placenta is most probably attached laterally, it is advisable, until this entire subject has been practically studied, to deliver per vaginam as a rule. If, therefore, the cervix be easily dilatable, and the hemorrhage moderate, we may proceed as suggested in the more hopeful cases of marginal implantation. But *even here* an undilated os associated with severe hemorrhage would constitute a very serious condition. If the rigidity were due to fibrosis, it should be abated by multiple incisions; if to carcinoma, the radial Cæsarean section would be indicated. If the cord were prolapsed, and after reposition still descended, the os being partly dilated and not dilatable, dangerous hemorrhage continuing meanwhile, the Cæsarean section would be unquestionably indicated for the safety of both mother and child.—*Med. and Surg. Reporter.*

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A NEW TEXT-BOOK ON ANATOMY.—P. Blakiston, Son & Co. have the pleasure of announcing for early publication a new and systematic text-book on anatomy, prepared especially to meet the requirements of the students and surgeons of to-day, written by ten of the foremost anatomists and surgeons in the English-speaking world, and containing about 600 illustrations, nearly every one having been specially drawn and engraved, and many of which will be printed in colors. The retail prices will be from six to eight dollars in cloth and leather bindings.

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AT the meeting of the Toronto Medical Society held on Nov. 5, Dr. R. A. Reeve presented the society with a portrait of the late Dr. Beaumont. On motion of Drs. Graham and Macdonald, a vote of thanks was given him with hearty applause

THE
Canadian Practitioner

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TORONTO, NOVEMBER 16, 1892.

THE PAN-AMERICAN MEDICAL CONGRESS.

The preliminary announcement of the first Pan-American Medical Congress gives a vast amount of interesting information about the meeting which will be held in Washington on September 5th to 8th, 1893. As it is a goodly sized book of 64 pages, we are unable to do more than extract some items which will be of interest to our readers.

The regulation as to membership is that members of the congress shall consist of such members of the medical profession of the western hemisphere as shall comply with the special regulations regarding registration. The following are considered the constituent countries of the congress: Argentine Republic, Bolivia, Brazil, British North America, British West Indies, Chili, Dominican Republic, Honduras, Mexico, Nicaragua, Paraguay, Peru, Salvador, Republic of Columbia, Republic of Costa Rica, Ecquador, Guatemala, Hayti, Hawaii, Spanish West Indies, United States, Uruguay, Venezuela, Danish, Dutch, and French West Indies.

The sections of the congress will be: (1) General Medicine, (2) General Surgery, (3) Military Medicine and Surgery, (4) Obstetrics, (5) Gynecology and Abdominal Surgery, (6) Therapeutics, (7) Anatomy, (8) Physiology, (9) Diseases of Children, (10) Pathology, (11) Ophthalmology, (12) Laryngology and Rhinology, (13) Otology, (14) Dermatology and Syphilography, (15) General Hygiene and Demography, (16) Marine Hygiene and Quarantine, (17) Orthopædic Surgery, (18) Diseases of the Mind and Nervous System, (19) Oral and Dental Surgery, (20) Medical Pedagogics, (21) Medical Jurisprudence, (22) Railway Surgery.

The general officers are: President, Dr. William Pepper, of Philadelphia; secretary-general, Dr. Charles A. L. Reed, of Cincinnati, and one vice-president for each constituent country of the congress. Dr. J. E. Graham, of Toronto, is the vice-president for Canada, or British North America. Dr. James F. W. Ross, of Toronto, is the representative of Canada on the Executive Committee. For each section there are a number of honorary presidents, one executive president, and several secretaries. Among such officers are the following from Canada: Section on General Medicine, secretary, Dr. Moorehouse, of London; section on General Surgery, secretary, Dr. F. G. Roddick, of Montreal; section on Military Medicine and Surgery, honorary presidents, Surgeon-General Bergin, of Cornwall, and Surgeon Strange, of Toronto; section on Obstetrics, honorary president, Dr. Adam H. Wright, of Toronto; secretary, Dr. J. C. Cameron, of Montreal; section on Gynecology and Abdominal Surgery, honorary president, Dr. James F. W. Ross, of Toronto; section on Therapeutics, honorary president, Dr. A. D. Blackader, of Montreal; secretary, Dr. J. L. Davison, of Toronto; section on Anatomy, Dr. F. L. Shepherd, of Montreal; section on Physiology, honorary president, Dr. Wesley Mills, of Montreal; secretary, Dr. A. B. Macallum, of Toronto; section on Diseases of Children, honorary president, Dr. A. D. Blackader, of Montreal; section on Pathology, honorary president, Dr. L. D. Mignault, of Montreal; secretary, Dr. John Caven, of Toronto; section on Ophthalmology, secretary, Dr. G. H. Burnham, of Toronto; section on Laryngology and Rhinology, honorary president, Dr. Stephen Dodge, of Halifax; secretary, Dr. G. W. Mayor, of Montreal; section on Otology, honorary presidents, Dr. Stephen Dodge, of Halifax, Dr. J. W. Good, of Winnipeg, and Dr. G. Sterling Ryerson, of Toronto; secretary, Dr. D. G. Wishart, of Toronto; section on Dermatology and Syphilography, secretary, Dr. J. E. Graham, of Toronto; section on Hygiene, Climatology, and Demography, honorary presidents, Dr. E. P. Lachapelle, of Montreal, and Dr. F. Montizambert, of Quebec; section on Marine Hygiene and Quarantine, secretary, Dr. J. J. Cassidy, of

Toronto; section on Orthopædic Surgery, secretary, Dr. B. E. McKenzie, of Toronto; section on Diseases of the Mind and Nervous System, honorary president, Dr. Joseph Workman, Toronto; secretary, Dr. Stephen Lett, of Guelph; section on Oral and Dental Surgery, honorary president, Dr. J. B. Willmott, of Toronto; secretary, Dr. Luke Teskey, of Toronto; section on Medical Pedagogics, honorary presidents, Dr. Fife Fowler, of Kingston, Drs. Walter B. Geikie and Adam H. Wright, of Toronto; section on Medical Jurisprudence, secretary, Dr. N. A. Powell, of Toronto; section on Railway Surgery, secretary, Dr. J. G. Roddick, of Montreal.

The following form the auxiliary committee for British North America: Ontario, Drs. J.F.W. Ross, John L. Bray, Jas. E. Graham, H. P. Wright, H. S. Griffin, V. H. Moore, Chas. E. Barnhart, W. H. Moorehouse, J. L. G. McCarthy, J. B. Lundy, H. Howitt, R. Henwood, A. Taylor, J. A. Eakins, D. S. Bowlby, R. A. Corbett, J. G. Scott, and A. B. Welford; Quebec, Drs. F. G. Shepherd, M. J. Ahren, R. A. D. King, J. A. Hamel, E. Gervais, F.J. Austin, E. N. Chevalier, and E. P. Lachapelle; Nova Scotia, Drs. W. S. Muir, A. D. MacGillivray, J. C. McDougall, W. H. McDonald, John Stewart, H. B. McPherson, W. B. Moore, C. J. Gossip, D. A. Campbell, A. Robinson, Miller, and Farrish; Manitoba, Drs. Chown, J. A. Macdonald, and R. Wilson; New Brunswick, Drs. J. Z. Currie, M. McLaren, Jno. B. Benson, H. B. Chandler, and F.L.Pedolin; Newfoundland, Dr. Alfred Hawey; Northwest Territories, Dr. J. H. C. Willoughby.

THE MEDICAL DEFENCE ASSOCIATION.

We had supposed that the conference between certain members of this association and the legislative committee of the Medical Council had been productive of a certain amount of good, and that, in consequence, the prospects of a fair and honorable compromise were all that could be desired. It was probably a matter of considerable surprise to the majority of Ontario practitioners when the letters of Dr. John H. Sangster, the secretary of the Defence Association, appeared recently in the Toronto *Mail*. From these it appears that the two bodies are not at all likely to come to anything like an agreement before the next meeting of the Provincial Legislature.

It will be remembered that at the meeting held in the council chamber, September 29th, the Defence physicians modified their demands to some extent. They asked that the penal clause be repealed; that the matter of the annual fee be left in abeyance until after the next election; that only the four universities of Ontario with teaching bodies be represented; that the regular profession have seventeen representatives; that the homœopathists have five representatives; that protested elections be referred to county judges.

The committee of the council agreed to make the penal clause inoperative until after the next election; they refused to abolish the annual fee; they agreed to increased representation of the general profession; they did not object to institutions which neither teach nor grant degrees being deprived of representation; they agreed that protested elections should be referred to county judges.

It will thus be seen that the differences between the two parties were not great. The president of the council showed a conciliatory spirit, and acknowledged that much dissatisfaction existed throughout the province with reference to certain actions of the Medical Council. Dr. Armour, in discussing financial matters, scored heavily against the ex-president, Dr. Williams, in his exposure of the ignorance of the latter respecting the subject, and the incorrect statements which had been made on several occasions with regard to the subject. Dr. Williams, in a somewhat grandiloquent style, had shown conclusively that the net cost of carrying the building was only $302. Dr. Armour showed from the official statement of the treasurer that the actual cost last year was $5,232. He figures it out as follows:

The building had cost.....	$96,390
After deducting the mortgage of..	60,000
The investment account is.....	36,300
The interest on investment and mortgage at 5 per cent. amounts to	4,891
In addition to the interest account, the cost of maintenance for the year was.....	4,510
Embracing caretaker, elevator-man, commission on rents, fuel, water, gas, insurance, repairs, taxes, and	

legal service, making the total yearly cost of carrying the building.....	9,329
Now deduct from this the income from rents.....	4,099
Making the net cost of carrying the building last year.....	$5,232

Dr. Williams showed more surprise than gratitude respecting the valuable lesson which he had thus received; in fact, we fear he let his "angry passions rise," and things became slightly *unpleasant.* The conciliatory and sensible remarks of Dr. Bergin and others mollified matters to a considerable extent, after which the formal demands of the Defence Association were made, and the answers given as above.

So far as we can learn, the general opinion is that the Defence members made the better showing at the conference; but they are quite likely to lose their advantage on account of the extreme stand, and the bitter tone, of him who is now writing for the association in his official capacity as secretary.

PRELIMINARY ADDRESS OF THE COMMITTEE OF THE WORLD'S CONGRESS AUXILIARY ON A MEDICO-CLIMATOLOGICAL CONGRESS.

A Local Committee of Arrangements has been appointed by the World's Congress Auxiliary, and an Advisory Council will be selected from those eminent in this department in different parts of the world to arrange a World's Congress of Medical Climatology, to be held at Chicago during the exposition season of 1893.

The design is to hold this congress at a time convenient to those who will attend the congresses of the other divisions of the Department of Medicine which are assigned to open May 29, 1893. This early date was chosen to accommodate those who will desire to attend the Medical Congress to be held in Rome in November of next year.

The following topics have been suggested, and others will doubtless be added before the final programme is announced:

The Leading Characteristics of the Climates of the various States, Countries, and Sections of the World.

Diseases Produced by the Climatic Peculiarities and Weather Changes in the various countries.

Relation of Climate to Consumption. Climates in which Consumptives Recover, or are Materially Benefited.

Health Resorts: Special Features.

Relation of Climatic Changes to Epidemics.

Changes of Climate due to Cultivation. The effects of the Destruction of Forests, and other Changes incident to Civilized Life.

The relations of Diet and Climate.

What may be done to Improve or Modify Climates for the Promotion of Health and Comfort?

Geography of Carcinomatous and Sarcomatous Diseases.

Geography of Bright's Diseases.

Climatic Factors which Produce Epidemic Influenza.

Relation of Climate to Rheumatism.

Relation of Climate to Catarrhal Diseases.

Relation of Climate to Longevity.

Waters and Climate.

Climatic Effects upon the Eye.

Relations of Climate to Diseases of the Ear.

The Effects of Sun Spots upon Climatic Conditions.

What more can the Weather Bureaus do to aid Climatologists and disseminate Climatological Knowledge?

Comparison of Climate Differences as manifested by Similar Diseases in the North and South Temperate Zones.

Climatic relations to Remittent and Periodical Fevers, and to Continued Fevers.

Climatic relations to Malaria.

Acclimation. Disorders produced by Migration.

It is the purpose of the committee, with the advice of the council, to arrange for a report from each state and country of its climatic peculiarities. The health resorts of each state and section will also be properly represented.

The bearing of climate upon such diseases as Rheumatism, Catarrh, Cancer, Bright's Disease, and generally upon Health and Longevity, will form especially interesting questions for consideration in the congress.

The committee would be pleased to have

suggestions as to topics and modes of proceeding, as well as those who may take part in the discussions. Proposals for membership of the Advisory Council are also invited.

All communications should be addressed to T. C. Duncan, M.D., Chairman of the Committee, World's Congress Headquarters, Chicago.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

The next meeting of this association will be held in Louisville, Ky., under the presidency of Dr. J. McFadden Gaston, of Atlanta, Ga. We learn from the preliminary programme, which has been forwarded to us by the secretary, Dr. W. E. B. Davis, of Birmingham, Ala., that over thirty papers had been promised some time ago. Among those who have promised to contribute are Dr. Gaston, Dr. Vander Veer, of Albany; Drs. Coe and Wylie, of New York; Dr. Joseph Price, of Philadelphia; Dr. Marcy, of Boston; Dr. Vance, of Louisville; Dr. Potter, of Buffalo; Dr. Kelly, of Baltimore; and Drs. W. E. B. Davis and J. D. S. Davis, of Birmingham. This vigorous young society has done admirable work, and we are glad to hear that the prospects for this meeting are very bright.

Meeting of Medical Societies.

CANADIAN MEDICAL ASSOCIATION.

(Continued from page 502.)

Dr. I. H. Cameron (Toronto): I have listened with great pleasure to the remarks of Dr. Bryce. I might say that quarantine of the old-fashioned kind is an exploded idea; the old-fashioned idea of putting people away for twenty or thirty days until the disease dies out will not meet the idea of life in the nineteenth century. The quarantine such as Dr. Bryce has outlined will be all-sufficient. Proof of that exists in the circumstance that, although the British ports had been exposed for some time to cholera, very few cases have occurred in the United Kingdom. By the prompt destruction of the germ in the way Dr. Bryce has suggested, the spread of cholera will be greatly prevented.

Dr. J. W. Milne (Vancouver): I am health officer of the city of Vancouver. You must discuss quarantine not only of the individual himself, but disinfection in every particular. To illustrate, although I do no wish to condemn any one at this time, either the Government or its officers, I will show how we were unprepared for smallpox in British Columbia. During the first week of June the "Empress of India" arrived at Vancouver. She is one of the finest ships of the C.P.R. line. She brought over a large number of immigrants, chiefly Chinese, and some Japanese and other passengers. A Chinaman was found ill with the disease. He was quarantined at the station, eight or nine miles from Victoria, and the ship was disinfected. Only the Chinamen were detained. The Japanese and other passengers were allowed to go to Vancouver and everywhere. When that vessel left Japan, smallpox was epidemic there. Now the Japanese passengers should have been quarantined. The Japanese passengers went out through the country, and we have had smallpox there to a great degree; and to show you that our apparatus at that time was inoperative and not sufficient for the case, in the city of Victoria we had only one case for six weeks after the arrival of the ship, and within ten days afterwards we had forty cases in the city of Victoria. You can understand what a panic it caused. Although I have never made it known there, and though I have never asked for a commission to see how the disease came to spread so rapidly, I will show you one point that I believe was the cause of that disease spreading. Within three days there were, I think, six grocers all taken down with smallpox. Two or three of these grocers died, so you can understand the feelings of the people on that occasion. I believe the Japanese teas were one mode of infecting the people of the city of Victoria. If we had had the proper apparatus to disinfect the cargo at the time, I do not believe we would have had one-half the number of the cases that we had there. Forewarned is forearmed. The Government have since taken proper steps to have a proper disinfecting apparatus there, which should be, and I hope will be, sufficient.

Dr. Bergin (Cornwall): I think it is unfair to the Minister, and unfair to the country, that we should conceal anything that we think is absolutely necessary to be done to secure immunity in this country from cholera. Dr. Bryce has pointed out that he is merely outlining the general features of what he thinks necessary to be done at Grosse Isle, for all these things must be done. None of them can we afford to overlook if we would secure this country from cholera. Now, I would like to ask Dr. Bryce, who has lately visited Grosse Isle, what provision has been made for disinfecting the buildings there after the immigrants leave them, and before the passengers are introduced into the new buildings? I am asking this in the interest of the Government, and in the interest of the country. I am asking this more than all in the interest of the Minister, who, not being a specialist, has asked us to give him the fullest and freest information today. I am asking him whether we are provided with the best and most thorough material for disinfecting the ships—whether we have it for disinfecting the cargoes as well as for disinfecting the clothing? I ask what means we have—and Dr. Bryce has incidentally directed attention to it—what means we have of reaching the ship with the necessary material for disinfecting it? I would ask what means we have for removing the passengers safely and comfortably from the ships to the island? I would ask what means we have for thoroughly disinfecting the ships before the passengers are returned to them, or whether it would not be better

for the Government to provide such a vessel as Dr. Bryce has spoken of as being in use in Philadelphia, and whether it would not be, in the emergency, the better means to take for using the apparatus I have mentioned?

Hon. Mr. Carling: I can assure you it gives me very great pleasure, indeed, to meet the Canadian Medical Association. This discussion shows that you are fully alive to the interests of the country, and prepared to do everything you can to prevent anything like an epidemic of cholera in this great Dominion of ours. I can assure you that the Government are fully alive to the importance of having everything that can be done (as has been said by my friend, Dr. Bergin) by the Government of the Dominion to prevent cholera appearing in Canada attended to before next spring. (Applause.) We sent to Toronto, and the authorities there at the Isolated Hospital were good enough to let us have a disinfecting steam apparatus that they had constructed for use at Grosse Isle, at what they paid for it, and that they are now having a new one constructed. We are using that to the best advantage for this autumn, but for next spring we have plans and specifications, and are receiving offers for the construction of steam disinfectors to be made this autumn and to be placed in position this autumn, so that there will be appliances to disinfect any vessels that come up the St. Lawrence. I believe the largest vessel that comes up the St. Lawrence can be disinfected inside of 12 or 14 hours with these appliances. (Applause.) No stone will be left unturned to make every quarantine station in Canada as complete as it is in any other country in the world, not excepting the United States.

Dr. Bray: It has afforded me very great pleasure individually, and I am sure it has also every member of the association, to listen to your lucid explanation of what the Government is doing to prevent the introduction of cholera into this country. The object of inviting you here to-day, before this national association, composed of members from one end of the Dominion to the other, was to strengthen the hands of the Government, and of your department in particular, in the course that you are pursuing. When you have a body of scientific men who have made this subject a special study supporting the Government in the policy they are pursuing, I am sure it will not only strengthen your hands, but also tend to allay the fears of the public. I have very great pleasure in tendering you a vote of thanks from the association. (Applause.)

Hon. Mr. Carling: I am exceedingly obliged to the association for their kindness, and I hope this is not the last time that I shall have the pleasure of meeting you. I am sure it is the desire of the citizens of the capital to make your stay here as pleasant as possible. I concur in your opinion that the discussion to which we have listened to-day will be of advantage to the whole Dominion, and possibly beyond the limits of Canada.

Dr. Henderson (Ottawa): In conversation with Prof. Webster, of Virginia, on the subject of cholera, he asked me to mention to the association that, during the late epidemic of cholera in the United States, he made inquiry as to the effect of occupation on the disease. He wanted a pointer as to prevention. He found that the mechanics employed in workshops of copper almost entirely escaped the disease. He thought that this fact might be of value, and wished it brought before this association. His suggestion was that vaporized copper might be used as protection. If the vapor of copper in workshops prevented the comma bacillus from thriving, why should not the same vapor be used for the purpose of protection against cholera?

Dr. W. W. Dickson: I think the meeting should give an expression of opinion as to the disposal of the bodies and clothing of those that die of the disease. I think we should not go on burying the remains of those who die of such diseases as smallpox, cholera, and typhus. I think the bodies and the clothing should be destroyed by fire. It has been suggested that a committee should be appointed to prepare resolutions offering suggestions to the department as to the proper means of carrying out the idea which I have just been endeavoring to express.

Dr. J. A. Mullen: I think the committee should deal with the question as a whole.

Dr. Bray: I think this should be referred to a committee who will consider the matter thoroughly and report to the meeting, and the report will then be forwarded to the department.

Dr. J. E. White (Toronto): I think the meeting should consider whether they are not reflecting on the officer of the department, who may be taking steps to do exactly what is now recommended to be done.

Dr. Bray: It would be indorsing his action.

Dr. Cameron moved that a committee be formed for the purpose of drawing up resolutions embodying the suggestions of this meeting on the subject.

The motion was agreed to, the committee appointed, and the meeting adjourned till to-morrow. The committee were: Dr. Bergin, chairman; Dr. Bryce, secretary; Drs. Dickson, Christie, Cameron, Playter, Milne, Lachapelle.

The committee brought in the following report, which was considered clause by clause, and adopted without amendment:

(1) That in the opinion of the association the time has come when public health interests demand the appointment of a permanent executive officer to supervise all matters relating to public health, such as quarantine and vital statistics, which are by law in charge of the Federal Government.

(2) That quarantine regulations should be made applicable to the protection of all the internal borders of the country, and that houses of observation and detention of suspects and hospitals for the treatment of the sick be supplied and equipped at Niagara and similar border points.

(3) That in view of the constant danger from clothing and baggage of immigrants, drying chambers should be constructed on every passenger ship, and their use enforced after the clothing and baggage are placed in the disinfecting solutions.

(4) That isolation rooms be supplied on the decks of all passenger ships for the treatment of those sick of suspected contagious diseases.

(5) That all passenger vessels be required to supply themselves with sterilizing apparatus for water for drinking purposes, such as that of West, used at the Philadelphia quarantine.

(6) That at quarantine stations all personal clothing, bedclothes, towels, etc., from the sick should be immediately placed in the disinfecting solutions, and that mattresses, pillows, etc., be burned immediately after use unless steam disinfecting appliances are at hand.

(7) That at whatever ports immigrants are to be permitted to land it is absolutely necessary (1) that facilities exist for housing and proper accommodation of suspects both from steerage and cabin, as well as for hospital accommodation, and extra tent accommodations should be always available; (2) that proper and sufficient bathrooms be supplied at every station where suspects can safely and comfortably wash; (3) that a safe and adequate supply of wholesome water be always on hand; (4) that modern latrines, with proper conveniences for the observation of the dejecta of the subjects, be supplied, and that after disinfection the sewage from the latrines be disposed of in a manner that will insure perfect safety; (5) that furnaces and fans be fitted up either on the wharf or on the quarantine steamer, whereby holds and cargoes of ships can be rapidly and thoroughly disinfected; (6) that at every station where there is no deep-water wharf safe and commodious steamers be provided for landing passengers, and for patrol observation and other quarantine purposes; (7) that ample bedding and clothing be provided at every station to supply the necessities of persons landed from the ships; (8) that the means for the safe and speedy disposal of the dead at quarantine stations have been given careful consideration by your committee, and it is of opinion that the ordinary practice of burial employed in the past at such stations as Grosse Isle may, if continued, be attended with danger, and would hence tend to render these stations unfit for continued use as such, and under these circumstances it is believed that cremation of the dead is the best way of securing the safety of the living; (9) that, in view of the imminent danger of cholera reaching America in 1893, the association is of opinion that the Government may very properly consider the expediency of preventing immigration to Canada from infected countries; (10) that, in the opinion of the association, it is a matter for regret that, though it is twenty-five years since Confederation, no Government executive officer has yet been appointed to the charge of quarantine and other Federal health matters, and the association urgently presses the immediate appointment of such an officer, in order that the foregoing recommendations be carried out with the greatest possible rapidity, and that such officer should be a man of the highest scientific attainments, a well-known sanitarian, and one devoted to the work.

THURSDAY MORNING,
September 22nd, 1892.

The president, Dr. Bray, in the chair.

Dr. J. E. Graham, of Toronto, opened the discussion in medicine by reading a paper on "Treatment of Pulmonary Tuberculosis." This paper was an exhaustive *résumé* of the treatment of phthisis as understood and taught to-day. Dr. Graham has fortunately spent the whole of last summer in Switzerland, and while there gave a great amount of attention to the prophylactic treatment of this disease, and he gave the association the full benefit of his investigations. He concluded by saying that we ought to be encouraged by at least two circumstances: (1) The great number of cases of healed tuberculosis, as demonstrated by the *post-mortem* room. Osler found evidence of such present in 7.5 per cent. of those persons who died of diseases other than phthisis. Bouchard makes the statement that in 75 per cent. of the sections at the Paris morgue, some signs of previous disease had been found. In many cases, too, there had been a complete cure, as no cultivation nor successful inoculation could be made from the nodules. It is also a curious fact that in some instances where bacilli have been found, they will neither grow nor produce the disease in animals. (2) Many physicians of long experience can point to cases of complete cure. These facts ought to impress us with the importance of making an early diagnosis, so as to place the patient under the most favorable conditions possible, and at the same time ought to stimulate us in the discovery of new and better methods, so as to still further reduce the number of unsuccessful cases. "By intelligent and persistent efforts to destroy the bacilli, or to prevent their entrance into the body; by general sanitation; by the careful management of individuals who have a hereditary predisposition; and by the open-air treatment, if possible, in special hospitals, for incipient as well as advanced cases, the ravages of the disease would, in my opinion, be diminished by one-half, and perhaps to a much greater extent."

Dr. L. Bulkley, of New York, read a paper on "Lupus Erythematosis." The paper was discussed by Drs. J. E. Graham, F. Shepherd, and F. Strange, who all agreed that if the results claimed for the treatment should continue a troublesome complaint was about to be conquered, but that sufficient time had not elapsed to pass judgment.

Dr. T. Johnston Alloway, of Montreal, then read his paper on "The Dependence of Abnormal Eye Conditions upon Uterine Disease." The discussion was brief. Dr. Dupuis remarked that in almost every case reported the round ligament had been shortened, and asked Dr. Alloway to describe his operation, which was done.

The next paper on the programme was the discussion in surgery, which was opened by Dr. D. MacLean, of Detroit, in a very elaborate paper.

Dr. H. V. Moore continued the discussion, and referred kindly to the fact that he had been a pupil of Dr. MacLean's when he was professor in Queen's College, Kingston, that Ann Arbor had taken him away from us, and that which was our loss was their gain.

Drs. R. A. Reeve, Dupuis, and Hon. M. Sullivan paid eulogies to Dr. MacLean and his work.

Dr. Hingston took exception to some of the remarks that Dr. MacLean had made about lithotomy and lithotrity, also about the relative advantages of internal and external urethrotomy, which brought Dr. MacLean again to his feet to defend his position. A vote of thanks was tendered for the interesting and scientific paper.

Dr. J. G. Balfour, of London, read a paper on "Administration of Chloroform and the Dangers Incident Thereto." Dr. James Grant, the acting chairman, in opening the discussion, referred to the uses of chloroform in the final stage of labor,

and extolled it greatly. The discussion was continued by Drs. MacLean, of Detroit; Hill, MacLaren, and others.

Dr. F. Shepherd, of Montreal, presented a unique case of nerve suture, in which the brachial plexus had been severed, and the different branches united after some months having elapsed since the accident. The condition had very materially benefited by the operation. It elicited remarks from Drs. Dewart and Hill, of Ottawa, who had seen the case prior to the operation.

Dr. F. Shepherd also read a paper on "Intussusception, and its Treatment by Operation," in the discussion of which Drs. Hill, Bergin, Christie, and others took part.

Dr. Harrison, of Quebec, presented a report of a case of "Gunshot Wound of the Abdomen," which was discussed by Drs. Jas. Bell and I. H. Cameron.

Dr. Harrison, of Selkirk, opened the discussion in obstetrics, in the absence of Dr. J. Chalmers Cameron, of Montreal (who was to have opened the discussion), and apologized for the fact that as he was supposed to follow Dr. Cameron's lead, and that he had not known what line would be followed, he had not prepared his remarks; but even in the impromptu remarks that he made a wonderful amount of good, sound advice, plain statement of facts, as well as a review of obstetric operations since his early professional life, were embodied, and it was one of the most enjoyable half hours of the meeting.

Dr. Machell, of Toronto, presented a specimen of bowel from a case that he had invaginated some days previously in Toronto.

The meeting was then adjourned—the next meeting to be held at London in September, 1893.

Correspondence.

UNIVERSITY SENATE ELECTIONS.

Editor of THE CANADIAN PRACTITIONER:

SIR,—In your editorial on the University Senate elections you say:

"Those who organized the opposition worked with tremendous determination, and left no stone unturned to attain their ends. The friends of those whom they wished to defeat took up the gauntlet with unbounded enthusiasm when they obtained some knowledge of the true inwardness of the attack. . . . What dreadful thing happened in the Medical Faculty of the University of Toronto to divide its members into two factions engaged in an unholy war? I know not."

Now I submit that these two extracts convey two scarcely consistent impressions. If the friends of yourself and Drs. McFarlane and Aikins knew something of "the true inwardness of the attack" on you, how is it that you did not, or do not, know why the members of the faculty were divided into two "factions"?

I have hitherto thought that you knew, but that the enthusiasm of your friends did not permit them, when in the thick of the fight, to recognize the true character of the situation, and I am aware that they fought for you and Drs. McFarlane and Aikins with the notion that the opposition to you was based on personal grounds. Now you say you do not know. Evidently you do not feel quite certain that your friends had, after all, some knowledge of the "true inwardness" of the affair.

If my interpretation of your language is correct, then it is possible, I believe, to convince you that the opposition to yourself and Dr. McFarlane was, and is, based on other than personal grounds. For that purpose I am ready to discuss, temperately and fairly, in the columns of THE PRACTITIONER, in the University Council, or in the Medical Faculty, all the causes of that opposition. That you do not know why myself and others have opposed you is not my fault; since I endeavored, over two months ago, to make my attitude toward you and Dr. McFarlane, and the reasons for it, perfectly clear to you.

You say also: "I regret exceedingly that Dr. John A. Mullin, of Hamilton, should have been dragged into the fight, and subjected to the humiliation of a defeat through no fault of his own." The word "dragged" and the expression "true inwardness" smack somewhat of an imitation of the ruling habit of *The Ontario Medical Journal*. Wherein conisted the humiliation? Dr. Mullin was defeated, it is true; but he stood up and fought fairly, and neither he nor any one of his colleagues of the ticket solicited votes for himself or collected ballot papers, to say nothing of plumpers. Had he or his colleagues done these things, defeat to them would have been a humiliation. These are stones which they left unturned. On the other hand, how can a success, in which these methods were important factors, be reconciled with the dignity of the university?

You cannot wish more heartily than I do for accord and union in the Medical Faculty. That may be attained, in my humble opinion, by the members of the faculty dealing with the "true inwardness" of questions of policy in a large-

hearted way, and not by referring to the motives of those on the one side or on the other. I find in the policy for which you are to a certain extent responsible, and which is, I think, a bad one for the university in the long run, quite enough to keep me from troubling myself about the motives of yourself and your friends; and against that policy, whether it has the support of friends or foes, I propose to fight, in season and out of season, with a determination, I trust, undamped by any failure which the hour may bring. Yours, etc.,

Toronto, Nov. 7. A. B. MACALLUM.

[I presume that Dr. Macallum, in the above letter, refers to his circular of August 25, when he says I ought to know why he is opposed to me. I may briefly say, with reference to that circular, that the statement that I have done any thing directly or indirectly to lower any standard in the University of Toronto is absolutely untrue. Personally, in a certain sense I cared nothing about the contents of the circular; but, I must confess, its issue caused me no little surprise. Dr. Macallum showed a great amount of magnanimity in accepting a professorship in the university, not because he wanted it, but because he desired to improve matters in the Medical Faculty. His charming method of giving expression to this aspect of his position was really quite touching in its modesty and simplicity. Perhaps the utterances of one so disinterested were worthy of more consideration than they received.

He told us in his circular that he had been for seven years a university examiner in the Medical Faculty. He had, during that time, seen many iniquitous things in the way of standard lowering. It seems to me an extraordinary thing that this great and high-minded man allowed the Senate to remain in ignorance of such facts for many years, and chose the middle of a bitter election campaign to give his information to the public, evidently for the purpose of making capital for himself and his colleagues.

But he didn't solicit votes for himself; therefore, it seems to be all right. Personal canvassing is very undignified. The "come tickle me, Tommy, and I'll tickle you" plan of conducting an election contest is better form. Each candidate in the combination can look holy and virtuous, as he works only for his colleagues, and relies on a generous reciprocity and the work of a thoroughly organized committee to bring in the votes. I have no desire to quarrel with the method; I rather like it, especially as I find it is such a source of comfort to a man like Dr. Mullin, who, as I thought, had been rather badly treated. I may say in this connection that I hope my allusion to Dr. Mullin was not considered unkind. What I said with reference to him was founded on information derived from one of his warmest friends. I certainly thought that he had gone into the contest with great reluctance.

It is somewhat unfortunate, in connection with Dr. Macallum's non-solicitation of votes, that so many strange rumors have reached us from western towns, where he made friendly calls on the resident physicians. It is well to know, however, that he was probably doing good missionary work, and nothing so wicked as soliciting votes. Will our friends in the west who have wrong ideas on the subject kindly make a note of this fact?

Dr. Macallum intimates that he will continue (as he expresses it) "to fight in season and out of season." I quite believe him; and if he can sacrifice or injure an occasional friend while on the warpath, it will probably give him immense satisfaction, because it furnishes such tangible evidence of his earnestness in his cause. In another portion of his letter he speaks of his readiness "to discuss temperately and fairly," etc.

"Now I submit that these two extracts convey two scarcely consistent impressions" (Macallum.) It may be, however, that the doctor, in talking about discussing anything "temperately and fairly," was simply becoming facetious.—A.H.W.]

Book Reviews.

The Diseases of the Stomach. By Dr. C. A. Ewald, Extraordinary Professor of Medicine at the University of Berlin, etc. Authorized translation from the second German edition by Morris Manges, A.M., M.D., attending physician to outdoor department, Mt Sinai Hospital, New York city, etc. Pp. 495, 30 illustrations. New York: D. Appleton & Co., 1892; Toronto: J. A. Carveth & Co.

A review of an important new work like this should contain at least an allusion to the work

of both publishers, translator, and author. The printer's errors are very few, the letter-press clear and distinct, the paper and binding of the best. For the translator too much cannot be said in praise of the way in which he has done his part. No Teutonisms appear on careful reading, and every one knows how hard it is to make the English of a translation sound like English at first hand, and avoid the idioms and idiosyncrasies of the original. The style and literary merits of this translation are superior, one may safely say, to the majority of treatises originally composed in English upon medical subjects.

But for the more important part played by the author we may say, first, that the series of lectures of which this is the second part in the trilogy was Ewald's *Feriencurse für praktische Aertze*. The first volume "discusssed the physiology of digestion in its practical relations," and the third, not yet published, is to take up intestinal diseases. The lectures are clinics, stenographically reported, with cases presented and detailed. The subjects upon which most stress is laid are gastric dilatation, gastric ulcer, gastric cancer, and gastric catarrh. A chapter of peculiar excellence upon the "Innervation of the Stomach," written by the author's brother, Dr. R. Ewald, Professor of Physiology at Strasbourg, must also be mentioned, as well as those upon methods of examination, especially the use of the stomach tube, and the chemical examination of stomach contents. One of the author's peculiar merits is his freedom from every rule of thumb, from enslavement to anything absolute or mechanical in determining his diagnosis. The exception is always as clearly stated as the rule, and yet the vagueness to which this might be expected to lead is neutralized by his large clinical experience. His views are advanced, not to say peculiar in certain cases, but well tempered by sound conservatism. The obscure question of the causation of gastric ulcer is well discussed, and decided opinions given on such points as the connection between floating kidney and gastrectasia, and the value of peptonized rectal injections. He claims that it is useless to peptonize them. The pathology of each disease is taken up at great length, and is of the most modern kind. For instance, he does not believe in melanotic carcinoma, and has the very latest views on "gastric anadenia." The national pride of the author is so evident as to be almost amusing. English writers (the bibliography of the work is very extensive) are treated with more consideration than French, though he fairly tries to give honor where honor is due, and in no case treats an opponent discourteously. "The failure to recognize a cancer probably occurs less frequently with us in Germany than elsewhere." "The Germans were the first to destroy this conception of dyspepsia as a disease"—such sentences as these occur, but are perhaps fairly counterbalanced by others of the opposite strain. The author's remarks on the use of condurango in gastric cancer cannot be omitted from a critique already too long: "Like so many of our new remedies, it owes its reputation as a specific to the implicit faith of some half-civilized or wild Indians, and to the speculation of enterprising exporters. At first it was received by acclamation by the medical world, which is pervaded by a surprising *naïveté* and an ineradicable optimism whenever new specifics for incurable diseases are introduced." Thus much of a concession to conservatism, sound and worthy, while the text-book is fully abreast of the times, and most valuable to the general practitioner who reads it.

The Essentials of Histology, descriptive and practical, for the use of students. By E. A. Schafer, F.R.S., Jordell Professor of Physiology in University College, London; Editor of the Histological Portion of Quain's "Anatomy." New (third) edition, revised and enlarged, illustrated by more than 300 figures, many of which are new. Philadelphia: Lea Brothers & Co., 1892; Toronto: J. A. Carveth & Co.

This really excellent little work on histology will be welcomed in its third edition by both students and teachers. A better work on the subject in the English language can hardly be found. None contains in so small a space the valuable information this one does. It has rightly deserved the popularity it has already gained. It will not lose by this new appearance. Some valuable additions and changes have been made, particularly on the subjects of muscle and of the central nervous system and nerve-endings. The chapters on muscle have been changed to

correspond with the latest work on the subject, and to make the subdivision of the work that holds throughout the book into lessons more effectual. The additions to the chapters on the central nervous system and nerve-endings illustrates well the value of Golgi's, Marchi's, and the author's modifications of the Weigert-Pal methods of preparation. These methods have been added to the already valuable section of this book devoted to "General Methods of Preserving and Hardening Tissues and Organs." The illustrations are good; the text is clear, concise, and readable. It is an excellent work for the student.

Pye's Surgical Handicraft. A manual of surgical manipulations, minor surgery, and other matters connected with the work of house surgeons and surgical dressers. First American, from the third London edition. Revised and edited by T. H. R. Crowle, F.R.C.S., Surgical Registrar to St. Mary's Hospital, etc. New York: E. B. Treat, 5 Cooper Union, 1892. Toronto: J. A. Carveth & Co.

This work has been before the profession since 1884, and it has now reached its third English edition. We think that the publishers have done wisely in arranging an American edition of this useful manual. It is stated that the work is mainly intended for house surgeons and surgical dressers; to such we heartily recommend it as a useful guide in the wards and in the operating room. It is essential that a house surgeon should provide himself with a reliable text-book, in which he will be able to find all necessary information with regard to the uses of the various forms of surgical apparatus, and in which he may learn of the principles involved in their application. We can confidently affirm that the work at present under review will be found thoroughly reliable and admirably suited for the purpose indicated. The work forms an excellent treatise on minor surgical operations. The chapter on fractures is carefully written, and is most comprehensive; the uses and abuses of splints being fully and clearly set forth. The general practitioner will find this book of value, in that it presents a large amount of information concerning surgical appliances which it is difficult to obtain from the larger works on surgery, such as the method of applying plaster-jackets, the methods of using different forms of apparatus for club foot, etc.

The publishers have presented us a very neat volume, printed in clear type, on good paper. The illustrations are excellent.

Personal.

THE Hon. Edward Blake sailed for England, Nov. 2.

Dr. WM. B. THISTLE was elected President of the University of Toronto Medical Society at the first meeting of this session.

DR. LAPTHORN SMITH, of Montreal, was elected a Fellow of the American Gynecological Society at its recent Brooklyn meeting.

DR. EDGAR M. HEWISH (Vict. '83), of Philadelphia, paid a short visit to Toronto on the first week of this month.

AT a meeting of the corporation of the Toronto School of Medicine, held November 10, Dr. J. E. Graham was elected the representative of that body in the Senate of the University of Toronto.

Obituary.

GEORGE ROSS, M.D.—McGill Medical College has sustained a great loss in the death, Nov. 9, of Dr. Ross, Associate-Dean of the Faculty. He had succeeded Dr. Howard as Professor of the Practice of Medicine, and was one of McGill's most gifted men. He was only 47 years of age at the time of his death, but he had lived long enough to become recognized as one of Canada's greatest physicians. His confrères in Montreal had given him the highest honors at their disposal. He was President of the Canadian Medical Association in 1890. His health had been failing for some years, and his last illness was somewhat extended. His friends, and they were many, in all parts of our Dominion, have our heartfelt sympathies in their sad bereavement.

Therapeutic Notes.

THE USE OF COD LIVER OIL IN RHEUMATISM.—Cod liver oil has obtained such a definite reputation against tuberculous and scrofuluos affections that we are apt to forget its virtues in other maladies. In the first instance, it was employed against chronic rheumatism, and gained enthusiastic opinions. I have before me the original report in reference to this latter use by Dr. Bardsley, of Manchester, who in April, 1807, wrote that it had then for thirty years enjoyed a very high local reputation. It had been much used in the Manchester Infirmary by Dr. Percival and by Dr. Bardsley himself. The latter reports that it is variable in its efficacy, often in the mild and more common forms not doing any appreciable good. He thought it most useful in chronic cases in elderly persons and in women debilitated by parturition. He thought that it seldom did good unless it fattened. His dose was half an ounce to an ounce and a half twice a day, and he found warm beer to be, with the laboring classes, the favorite vehicle. If benefit was obtained, it ought to be continued for six or eight months. He asserts: "I have seen a few patients recover entirely by the exhibition of the oil who on their admission into the house were unable either to preserve the body in an erect position, or support its weight on the lower extremities." The consumption of cod liver oil in the Manchester Infirmary from 1776 to 1807 had averaged fifty or sixty gallons annually. It now amounts to four hundred gallons. The profusion with which new chemical remedies have been supplied to us of late years may, it is very possible, have led to the comparative neglect of old ones, and that, perhaps, not always to the advantage of our patients.—*Archives of Surgery.*

THE TREATMENT OF HEPATIC COLIC.—Coladon (*Wiener. medicin. Presse*, No. 33, p. 1330) describes among the prodomes of an attack of hepatic colic a peculiar drowsiness; general lassitude, notwithstanding sound sleep; irregularity of pulse, especially at the temples; a false sense of hunger; a sense of emptiness in the epigastrium, or distinct nausea; a sense of contraction of the œsophagus; eructations and polyuria. Then follow a sense of pressure in the hypochondrium, abdominal distension, and tenderness in the region of the gall-bladder. During this stage treatment should be expectant; purgatives and emetics do harm. Absolute mental and physical rest are to be recommended, together with a restricted diet. When the attack has set in, subcutaneous injections of morphine, particularly at first, are to be avoided, on account of the danger of causing impaction of the calculus. Inhalation of chloroform, short of complete anæsthesia, will serve to mitigate the intensity of the pain without diminishing the contractility of the biliary passages. The application of a hot-water bag to the epigastrium and another to the back is also a useful measure. As the attack is coming to an end, purgatives are to be given for the purpose of carrying the calculi out of the intestinal canal. Cholagogues find an indication here, of which ox-gall and podophyllin are to be preferred. Podophyllin is to be given in small doses for several days. To prevent the recurrence of an attack, the best measure is a careful regulation of the diet. Cold douches upon the right hypochondrium are useful. Massage of the hypochondrium is an important mechanical prophylactic measure, and may be practised by the patient daily, morning and evening, for fifteen minutes.—*Medical News.*

FILTERED OR BOILED WATER?—M. A. J. Martin, under this title, presents a very carefully studied paper. Recognizing the fact that many filters, so far from separating the bacteria, may even make the water richer in these organisms, this method cannot be recommended. Boiled water has lost its carbonic acid gas, and the salts of lime and magnesia are precipitated; the taste is flat, although on standing in a cool place it reabsorbs the greater portion of the lost gas. Even boiled water ought not to be long preserved. The problem apparently was solved in heating the water without loss of air, cooling it mechanically, and adding oxygen by means of an air-pump, or it can be boiled in closed bottles. Various ingenious apparatus have been devised for boiling water in closed vessels under pressure, and cooling it in the same apparatus. Investigations

have shown that the slight differences observed in the chemical composition of the water before and after sterilization have not altered its potability. With a filter, one can drink only the water of which he knows the source; with boiling, one can use any water. Boiling, then, should be the procedure of choice as soon as any suspicion arises; it should be the rule, especially in large cities, during the progress of any epidemic.—*Gazette hebdomadaire de Médecine et de Chirurgie—American Journal of Medical Science.*

THE ACTION OF CHLOROFORM ON THE HEART.—According to a telegram received from Surgeon-Major Lawrie on Monday last, he has by means of a series of ingenious experiments at last succeeded in obtaining irrefutable proof of the Hyderabad Commission that choloroform does not act directly on the heart. By a modification of the experiment of cross-circulation, he was enabled to investigate the action of chloroform vapor on the nervous system apart from the rest of the organism, and *vice versâ*. Briefly stated, he found that if the blood containing the chloroform vapor were prevented having access to the brain no effect is produced on the respiration function, the blood pressure does not fall, and anæsthesia is not brought about. By reversing the experiment, the chloroform-laden blood circulating in the brain only, the characteristic fall of blood pressure occurs and anæsthesia follows. It is of course impossible to criticize results until we have been made acquainted with the details of the experiments; but unless some flaw in the *modus operandi* vitiates the findings, the results of Mr. Lawrie's investigation would appear to furnish the actual proof of the much-contested conclusion formulated by the Hyderabad Commission.—*Medical Press and Circular.*

BENZOATE OF SODA IN THERAPEUTICS.—Dr. Liégeois has written an exhaustive paper on the value of benzoate of soda in therapeutics. He considers this agent as of the greatest importance in the affections below named, provided it is given in large doses. The pain, dysphagia, and inflammation of the pharynx in the common sore throat are favorably modified and cured in two or three days by the administration of 1 drachm in children, and 3 drachms in adults, of benzoate of soda daily. In diphtheria it is certainly of service either internally or in insufflation, but is not equal to applications of salicylic acid. In laryngitis and the ordinary acute bronchitis, M. Liégeois considers it as a good expectorant when given at the onset. He prescribes it as follows:

℞.—Benzoate of soda ʒj.
Tinct. aconite, *m* xx.
Cherry laurel water, ʒj.
Syrup of tolu, } *aa* ℥ ij.
Syrup of codeine, }
Water, ʒij.

To be taken in the twenty-four hours.

Associated with tannin, benzoate of soda gives good results in Bright's disease if persevered in:

℞.—Benzoate of soda, } *aa* ʒ jss.
Tannin, }
Ext. of gentian, q. s.

Divide into 100 pills. Take 6 daily.

Given in small doses in uric acid gravel, it transforms the insoluble urates into soluble hippurates, and thus eliminates it from the urine. As a cholagogue, benzoate of soda occupies the first rank; he associated it with salicylic of soda and rhubarb:

℞.—Benzoate of soda, }
Salicylate of soda, } *aa* ʒj.
Rhubarb (powdered), }
Nux vomica (powdered), grs. x.

Divide into 20 powders. Take 2 daily.

—*Medical Press.*

RHEUMATIC BRONCHITIS.—

℞.	Sodii salicylatis . .	ʒvi
	Glycerine	ʒiv
	Vini colch, rad . .	ʒvi
	Syr. scillæ comp . . .	℥iss
	Tr. opii camph . .	℥ij—M.

Sig.—A teaspoonful every three or four hours in a little water.—*Dr. N. S. Davis, in Med. and Surg. Reporter.*

MIXTURE AGAINST VOMITING.—

Menthol, . . .	℥ss
Alcohol, ...	℥ss
Syrup, ...	℥iiiss

A teaspoonful every hour.

—*Med. Press and Circular.*

THE DIETETIC TREATMENT OF ULCER OF THE STOMACH.—Dr. F. Roux states that the treatment of this disease must not be based upon the principle of reducing the work done by the stomach to a minimum. The diet must consist of substances which are digested in the intestines, such as milk, eggs, farinaceous food, fruit, and green vegetables. Farinaceous foods play an important part in the treatment of gastric disease; together with eggs they should constitute the chief diet; but, in order that they might not irritate the gastric mucous membrane, they should be administered in a soluble form. Of potatoes, beans, and lentils, the meal of the latter is probably the best, as it contains a large amount of nitrogen and a quantity of iron equal to that contained in meat. Light puddings are nutritious, especially when made with eggs; green vegetables are useful; carrots and turnips should be mashed; green peas and salads may be eaten; cabbage should be prohibited; fruits should be cooked, as they are not readily digested in the raw state. The single exception to this are grapes, which can be given at any time and in any quantity, especially if constipation is present. They are best taken in the morning and middle of the day.—*Journal d' Hygiène.*

FOR INTESTINAL ANTISEPSIS, Dujardin-Beaumetz suggests the following:

℞. Salol,
Salicylate of bismuth,
Bicarbonate of sodium, aa 150 grains. M.

Sig.—To be divided into 30 powders in capsules. One capsule to be taken before breakfast and before dinner.—*Coll. and Clin. Record.*

ANTIPYRIN IN EPISTAXIS.—Dr. E. G. West, of Boston, says he has yet to find an agent so reliable in epistaxis as antipyrin. It is his custom, when a case of unusual violence occurs, to saturate a pledget of cotton with a solution of antipyrin or with the dry powder, and introduce it into the nostril. It has stopped the bleeding in every instance that he has applied it. The patient, by this method, is spared the disagreeable tarry clots formed by the solutions of iron so commonly used for this purpose.—*N. Y. Med. Jour.*

WHEN it is desirable to prescribe podophyllin it is well to remember its solubility in tincture of ginger, in which it may be administered as follows:

℞. Resinæ podophylli, - gr. ij
Tinct. zingiberis, - . f℥ j. M.

Sig.—Dose, a teaspoonful in a glass of sweetened water on retiring.—*Med. and Surg. Reporter.*

FOR OFFENSIVE PERSPIRATION.—Filter paper impregnated with a solution of salicylic acid, laid between the toes and around the foot prior to drawing on the stocking, will, it is said, entirely prevent any fœtid odor from the perspiration of the feet.—*American Druggist.*

Miscellaneous.

CANADIAN DOCTORS AND THE ANNUAL TAX.—The medical men of Ontario view with extreme disfavor the proceeding of the Medical Council in obtaining legislative authority to impose an annual fee of two dollars and a certificate of registration from every medical practitioner, and a conference recently took place between the Legislative Committee of the Ontario Medical Council and representatives of the Medical Defence Association. In addition to the objections taken to the annual fee, the Defence Association demand that the territorial representation on the council be increased from twelve to seventeen, and that the number of representatives from the universities be cut down. After a long discussion, the Legislative Committee agreed to an increase in the territorial, *alias* provincial, representation on the council, and to the suspension of the amendments to the defeated 1890 Act, which provide for the annual tax, but they declined to advise that the number of university representatives be curtailed. The Defence Association is not satisfied with these apparent concessions, on the ground that the penalty for non-payment of the tax, viz., erasure from the register, was never enforced, and was therefore *de facto* suspended. The association is an influential body, and we trust they may effect in Ontario what the profession over here is beginning to clamor for; that is to say, a reduction in the number of

council members representing petty corporate interests, and an increase in the proportion of elected members. Such a reform would be worth paying two dollars a year for.—*Med. Press and Circular.*

CYCLING FOR CHILDREN.—Something like a newspaper controversy is going on as to the question whether cycling is injurious to health. The matter was very well put by Dr. Luff in his address to the students at St. Mary's Hospital, and extensively quoted from our pages in the public press. Cycling is no exception to the golden rule of moderation in all things. It is the pace that kills, and unfortunately most cycling clubs appear to be disposed to encouraging racing unduly. This is a great mistake; it makes the mere traversing of the ground an end, whereas it ought only to be a means to an end. The safety bicycles, which are now the favorite pattern, encourage, if they do not compel, a style of riding which tends to bow the back and contract the chest. The effect on boys and youths who are not naturally well developed is undoubtedly injurious, and we should regard with some suspicion the advice given by a medical writer in the *Bicycling News*, which would encourage parents to let their children bicycle. The tricycle is much better adapted for them, and, if of proper size and properly adjusted, its use may be of benefit if the amount of exercise is carefully regulated. Probably the best companion for a child is a middle-aged rider who traverses a moderate distance, at a moderate pace, who will not indulge in trials of speed against time, and is not ashamed to dismount at a hill too steep to be ridden with comfort. The strain upon the heart on a steep incline, especially if the surface is bad, may be seriously injurious.—*Brit. Med. Jour.*

THE VICE-CHANCELLORSHIP OF THE UNIVERSITY.—At the meeting of the Senate, Nov. 11, Mr. W. Mulock was re-elected vice-chancellor, practically without opposition. It was conceded by all that he would be elected as a matter of course, but certain parties wished to place themselves on record as voting against him, and Dr. I. H. Cameron good-naturedly allowed himself to be the medium for their purposes. The vote stood: Mulock, 31; Cameron, 15. Dr. Cameron explained that he did not wish the position, and could not take it if he were elected. Notwithstanding his explanation, his action in allowing his name to stand caused considerable surprise, and, in some quarters at least, regret.

THE WINYAH SANITARIUM for diseases of the lungs and throat, in Ashville, N. C., was destroyed by fire, August 24; but the occupants (175 in number) were removed without any accident. We understand the sanitarium is being rapidly rebuilt, and it is expected that the new structure will be ready for the reception of patients, on Nov. 20, and will still be under the direction of Dr. Karl Von Ruck, who is very well known in the United States, and to a certain extent in Canada, through his contributions to medical literature.

MESSRS. LEA BROTHERS & Co. will shortly issue a text-book on Nervous and Mental Diseases, by Dr. Landon Carter Gray, Professor of Diseases of the Mind and Nervous System in the New York Polyclinic.

ALARMED.— Physician (after examination) —Well, colonel, you have water on the brain.

Kentuckian — Great heavens, doctor! Is there any danger of it reaching my stomach?—*Life.*

THE books and surgical instruments of the late Dr. John Fulton will be sold by auction at The Mart, 57 King street east, Toronto, on Friday, Nov. 18.

IT is said that the numbers of medical students in Edinburgh are much less this session than they have been for several years.

THE second International Dermatological Congress was held in Vienna from September 5th to 10th, 1892.

ANTIPYRINE is reputed to possess hæmostatic properties when applied to the bleeding part in the form of a saturated aqueous solution.

THE CANADIAN PRACTITIONER is printed for the Publishers by Messrs. BROUGH & CASWELL, 18 to 20 Bay St., Toronto. Messrs. Brough & Caswell make a specialty of fine office stationery for Physicians' use, and of announcements, calendars, etc., for medical institutions. Correspondence solicited.

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TORONTO, DECEMBER 1, 1892.

Original Communications.

OBSERVATIONS ON THE PROGRESS OF SURGERY IN OUR OWN DAY.*

BY DONALD MACLEAN, M.D., DETROIT.

The multiplicity of associations for the study and advancement of the many departments of science is one of the most striking and, I may add, most valuable features of the age in which we live. The marvellous improvements in the facilities for travelling have rendered this possible; so that surgery, not less than many other departments of modern science and art, is deeply indebted for its unprecedented advancement in our day to the practical applications of that particular form of motion commonly called steam.

Not to do more than mention the production and dissemination of surgical literature thereby made practicable, the possibilities for personal contact and the interchange of opinions and experience, supplying and sustaining in ever-increasing degree the mighty stimulus of emulation which have been secured to us through the beneficent power of steam, even we of the very generation who have seen and known all about it sometimes, I think, fail to fully realize. Medical associations, as we have them, were not possible in former generations; and while many and various influences have combined to secure the unprecedented advance which, no one can deny, surgery has made in our day, my firm belief is that the union and communion between different men, and different schools, and different nations rendered possible by the means referred to is one of the greatest of all the powers which have worked together for the development and improvement of this the most directly humanitarian of all the arts and sciences.

But while claiming for such associations as the Canadian Medical the most unstinted credit as a means of advancement, I am far from being so certain that such functions as the one which your kind and generous partiality has accorded to me are to be regarded as the most effective or profitable mode of using the time and energies of the members.

I am an ardent advocate of such meetings as the present one. The reading and discussion of original papers, the reporting of cases, the exhibition of instruments and specimens, the congenial gathering of ourselves together, sometimes from long distances, the recalling of old associations and the forming of new, the hospitable and convivial breaking of bread and drinking of water in each other's society, the after-dinner speech and all that it implies, I approve of with all my heart.

But when it comes to didactic addresses even on surgery, and the progress, and the wonder, and the glory thereof, I am not quite so clear; unless, peradventure, the orator happens to have the power, genius, and courage of a Tait to electrify his audience and the whole profession with

*Read before the meeting of the Canadian Medical Association, Ottawa, Sept. 22nd, 1892.

the originality and, at the same time, the reasonableness of his revolutionary views as to the best ways and means of teaching surgery; or the no less impressive force and grace of a Hingston, by virtue of which the mental eye of the greatest of all medical associations is persuaded to open widely in amazement and delight as a system of aboriginal surgery practised in the wilds of far-off America is unfolded in language not less remarkable for its simplicity and clearness than for its eloquence and pathos.

Happy, indeed, are the orators who can deliver, and the associations which have the privilege of listening to, such addresses. In undertaking to speak of the progress of surgery in our own time, it will at once become obvious that, on such an occasion as the present, it is out of the question to attempt to do more than mention a few of the more salient features of the theme, as they happen to appear to the individual who, for the time being, has the floor.

To treat the subject exhaustively, or to any extent analytically, endeavoring to set forth in due form and in their proper order, chronologically or otherwise, the manifold steps and processes, and the parts played by different individuals, whereby the results in which we so much delight to glory have been attained, implies an effort transcendently beyond the most latitudinarian estimate of the scope and aim of my present duty. The utmost that I can presume to attempt on the present occasion is the presentation of a few of the thoughts suggested to my own mind by the deliberate contemplation of some of the changes in surgical thought and practice which have taken place during the generation to which we happen to belong.

You and I have been interested spectators of, and more or less active participants in, a great contest with enemies of our common humanity of the most malevolent and uncompromising character. This battle commenced long before our day, and without doubt will continue to rage long after we have individually been forced to lay down our arms and pass over to that vast majority which has preceded us. In the meantime, however, we pause for a brief space in the thick of the fight for the purpose of permitting one of the rank and file the opportunity of recording a few of the impressions made upon his own mind respecting the progress of events in that part of the eternal struggle in which you and he have had the great honor of playing some part, each one according to his ability, whether that be greater, or whether it be humbler.

In attempting to explain the rapid progress of surgery in recent times, and summing up the most powerful of the agencies by which this progress has been effected, large credit has been accorded to two or three data which certainly have borne a sort of pivotal relation to the whole subject. These are, first, the discovery of anæsthetics, the influence of which is unquestionable and incalculable; the second is, in a word, bacteriology, of which it may be said, I think, that the influence for good has been practically infinite; the third I have already mentioned, viz., steam, and of this agency I think it may be truly said that its influence has been at least as great as that of any other, not excepting even those just mentioned.

There are at least three other agencies of a general character whose influence has been, in my opinion, very great, although I do not think that they have always received the recognition to which they are justly entitled.

The first of these might be described as "Our inheritance, or birthright." I refer to the great stimulus given to surgery by the life and works and teachings of such men as Sir Astley Cooper, Sir Benjamin Brodie, John Bell, the true progenitor of ovariotomy, and all that that implies; Liston and Syme, Langenbeck and Desault, and many others who adorned the generation immediately preceding our own. If the torch of surgery has burned more brilliantly and effectively in our day than in any preceding age, to the inspiration supplied by these great men is due much of the credit. The stimulating and inspiring influence of their characters and labors has warmed into active, earnest, and successful effort the Listers, the Senns, the Taits, and all the captains of the hosts of our own great and notable day and generation.

The second is the characteristic spirit of the age, which has had its effect upon other department of science as well, and on surgery as much as any. I mean that spirit which is so well exemplified in the work and the methods of Darwin and his followers, who once for all demolished that great stumbling-block in the way of

scientific and philosophical progress, viz., the idolatry of authority, with the resulting dread of original and independent speculation.

In our day surgeons, like the workers in other fields of science and art, have claimed the right to think and reason for themselves, and to pursue their speculations to their ultimate conclusions, and in so doing they have, in large measure, developed the faculty of judiciously estimating the proper relations between observed facts, on the one hand, and speculative deductions therefrom, on the other.

The day is past, and gone forever, when an observing and thoughtful surgeon would tremble in the presence of his own observations, and refrain from reasoning out any theory based thereon to its logical conclusion and applying it in practice lest, peradventure, it might land him in a contradiction of the previously accepted orthodox beliefs which, with all their accumulated load of inherited respectability, have been handed down to him to be carefully cherished and worshipped as the *ultima thule* of all truth and wisdom.

How many pathological, anatomical, and surgical dogmas of the most venerable antiquity has our generation seen swept away like so many stumbling-blocks and rocks of offence in the way of the benediction-laden ship of modern progress?

And, in this great work, may we not justly claim for the new world as large a meed of praise as for the old? Is it not a plain fact that the spirit of original investigation and independent speculation has been abroad in every section of this great western hemisphere, in consequence of which an amount and kind of surgical progress has been accomplished which has commanded the most respectable recognition from the whole world, and especially from those places in Europe which have hitherto been regarded as the very fountain sources of all medical and surgical truth?

This is one of the most remarkable and, to us at any rate, one of the most interesting features of the great surgical age. In times past, American students have flocked to the European schools to complete their surgical education, and they do so yet, and undoubtedly with great advantage; nevertheless, the time has arrived when the necessity for such pilgrimages is becoming every day less and less apparent, and when the question is more and more asked, and with ever-increasing show of reason, whether we are not in a position to make at least a reasonable return in kind for all that the east is able to bestow upon us, and to confer as valuable gifts upon the surgical pilgrim from Europe as American pilgrims were able to obtain there. The current has certainly begun to flow in this direction, and I am convinced that it will continue to do so until a course of American surgery will come to be regarded as indispensable to Europeans as in former times a European one has been to Americans. The beneficent results which such a system of reciprocal instruction and inspiration would insure directly and indirectly to humanity in general might possibly be foreshadowed in the ecstatic flight of a poet's dream or a prophet's imagination, but certainly it cannot be done justice to in the commonplace terms and limitations of such a discourse as this.

A third and, perhaps, equally potent feature in the progress of modern surgery is the creation and growth of the so-called specialties. Notwithstanding the fact that it has been fashionable in certain quarters to sneer at, or even to condemn, this more or less artificial division of labor; and notwithstanding the undeniable fact that some rather serious abuses have risen therefrom, and it has not been an altogether unqualified blessing, still it is impossible to close our eyes to the fact that otherwise unattainable advantages have accrued to surgery by the devotion of certain individuals to more or less clearly marked out segments of the great field, and that such individuals should come to be known as ophthalmologists, gynecologists, and so forth, was no more than natural and proper, provided, always, that they started out in the first place as fully equipped general surgeons.

The ophthalmologist or the gynecologist who is not a general surgeon is like a sailor whose powers as a navigator are confined to one side only of his ship. In other words, the exclusive specialist, the man who knows practically nothing outside of the narrow artificial limitations of his own specialty, is *prima facie* a quack, and for his existence and his foolishness honest scientific specialism should not be held responsible. *Every surgeon need not be a specialist, but every specialist must be a surgeon.*

I do not know that there could be a much better criterion of the progress of surgery in recent years than a fair and impartial study of the authoritative utterances of some generally recognized master of a bygone age in contrast with what we are able to note as to the present state of the art.

For this purpose allow me to call your attention to the address in surgery delivered before the British Medical Association at its annual meeting in Leamington in August, 1865, just twenty-seven years ago, by James Syme, the then Professor of Clinical Surgery in the University of Edinburgh. It is but natural for me to select this address as my text, first, on personal grounds, having had the privilege of enjoying, as a student, an intimate acquaintance with the author; and, secondly, because it is of the nature of the review of the progress of surgery in a given period, viz., forty years, as it appeared to one who deservedly stood in the very front rank among the teachers and apostles of the art and science of surgery during the whole of the epoch covered by the address —one whose doctrines are to-day quoted with respectful consideration at least as frequently as those of any individual who has ever taught surgery, unless, perhaps, with the single exception of John Hunter.

The whole address is characteristic of the man and of his life work—plain, direct, uncompromising, earnest, and practical—"For he taught them as one having authority, and not as the scribes."

I will try to select a few of the most suggestive points in this address for our present consideration.

Of course, the dressing of wounds is one of the most interesting topics referred to, and in that connection the old method, which consisted in hermetically sealing the edges or cut surfaces of a wound and retaining them in that condition for a certain definite orthodox period of time before changing the dressing, is condemned, the result of this treatment being a total prevention of union by first intention. "To avoid this great evil," says the writer, "I advised that the edges should not be brought together until the bleeding had ceased, and that there should be no impermeable covering placed over them. The principles which I thus endeavored to establish are now, I believe, generally recognized in practice."

It was in accordance with the eternal fitness of things that his own son-in-law should have been the one to take up this subject where Syme left it off, and to have worked out all these theoretical and practical details of wound-dressing which are now so universally known and practised under the title of antiseptic and aseptic treatment. Without pausing to discuss the merits of this much-debated and somewhat hackneyed subject, from either an abstract or practical point of view, we must all admit that the industry and faithfulness with which it has been worked out have brought forth good fruits of a practical character, and have certainly entitled their distinguished author to all the credit and honor which has been so abundantly showered upon him by a grateful and appreciative profession.

Moreover, we are in a position to claim for the results of our wound treatment to-day a degree of safety and efficiency which Mr. Syme would be the first to recognize and applaud if he could have the opportunity of observing it.

In discussing the subject of articular disease, rest by means of the long splint, counter-irritation by means of the actual cautery, and in the advanced cases resection of the articular surfaces, together with general tonics at all stages, comprise the treatment recommended. Thanks to the teaching of American surgeons, under the leadership of Dr. Louis A. Sayre, of New York, we are able to claim a material advance in this department of practical surgery. Rest and extension by weight and pulley—compression and protection—as well as rest by well-fitting plaster of Paris casts, extension splints, and braces of various kinds, the free use of tenotomy, early opening and scraping out of all tubercular matter and other injurious débris from the affected joint, with or without removing the osseous surfaces—all these have been added to our resources since Syme's day, and it is worthy of note that the operation of resection of the hip joint, now so successfully practised in suitable cases, does not seem to have ever been taken into consideration by him, or any one else at that time, at least in Europe.

The operation of subcutaneous treatment of loose cartilages in the knee joint is mentioned

as a safe and easy method of treatment; but with our modern safeguards against septic infection, we do not hesitate to cut right down in any case of the kind, remove the offending body, and close up the wound, just as we would do in any other part of the body.

For the arrest of hemorrhage, the use of the silk ligature, leaving both ends protruding to furnish drainage, is strongly advocated. Now we use a carefully prepared animal ligature, cut it short, close the wound, apply a comfortable protective dressing, and confidently look for union by first intention, and we do not expect to hear from the ligature afterwards.

Referring to the surgery of the head, we meet at once with the matter-of-fact statement that "much has been done in the way of improvement," and the following instances are cited:

(1) An improved method of enucleation of the eyeball.

(2) Bowman's operation for fistula lachrymalis.

(3) Tenotomy for strabismus.

(4) Improved methods of treating nasal polypi.

(5) Tonsillotomy.

(6) Excision of the maxillary bones for tumors.

No mention whatever is made of the operation of trephining. In his book on the principles of surgery, however, we find a description of that operation along with this commentary: "Cases admitting of this operation are extremely rare, and I never knew a successful case of it."

If time permitted us here and now to present the testimony of the ophthalmologist, the otologist, the laryngologist, and, last but not least, the brain surgeon of to-day, as to the surgery of the head as a definite field for surgical effort, how marvellous would the contrast appear!

In speaking of the thoracic region, the only point considered worthy of mention by Mr. Syme is the diagnosis and treatment of cystic tumors of the mamma. Had resection of one or more ribs for empyema been dreamed of at that time, it certainly would not have been omitted; so that we may fairly reckon that most satisfactory procedure in the long list of solid surgical advances gained within the last quarter of a century.

"Descending to the pelvis" (to use his own works) the following substantial steps are noted:

(1) The treatment of hydrocele by the injection of the tincture of iodine after tapping.

(2) The treatment of the diseases of the rectum, fistula, fissure, hemorrhoids, and stricture, by methods precisely similar to those used now. No mention is made of operations for cancer of the rectum, which are so frequently and successfully performed nowadays, especially since the method of first removing the coccyx, and, if necessary, a portion of the sacrum, has been resorted to.

Stone in the bladder and stricture of the urethra are discussed, and in the former the left lateral operation of Cheselden is advocated, and in stricture gradual dilatation and external urethrotomy are recommended as the most suitable methods of treatment, and, for my own part, I am inclined to believe that these teachings have not been materially improved upon up to the present day, although there is no doubt a certain field of usefulness for internal urethrotomy.

Speaking of the female pelvis, he says: "The most remarkable change that has taken place in the way of improvement is in the treatment of vesico-vaginal fistula, which was formerly held to be nearly, if not altogether, incurable, and is now remedied, no less easily than certainly, through means of silver sutures, for the introduction of which we are indebted to Dr. Marion Sims." In contrast with this brief but authoritative utterance of the foremost surgeon of Europe twenty-seven years ago, we have to set the whole science and art of gynecological surgery with its magnificent record of brilliant discoveries in pathology, and its still more brilliant operative procedures, for the relief of suffering and the saving of life. Add to this the marvellous fact that there is hardly a single viscus contained in the *abdominal* cavity that has not, during these few intervening years, been securely placed within the reach of the surgeon's diagnostic and operative power.

To even enumerate the individual operations and other definite and assured gains of this great field of modern surgery would require an expenditure of time which we cannot afford;

besides, to such an audience as I have the honor of addressing, any such enumeration is superfluous.

It is in regard to the contents of the various cavities of the body, the cranium, the thorax, the abdomen, the pelvis, that the most valuable and the most astounding surgical advances have been made; and I think it is no more than the simple truth to say that neither Syme, nor any single individual of his time, were able, in their most hopeful and prophetic moments of surgical aspiration, to even conceive of anything approaching such results as have been positively and permanently arrived at.

To my old master it could not, however, fail to be a source of the utmost satisfaction, could he but know it, that to some, in fact, a goodly number, of his own pupils the world is directly or indirectly indebted for a great deal of the success of this great movement in the onward march of surgery.

It would no doubt be an easy matter to illustrate in other ways, and to a much greater extent, the progressive changes which the science and art of surgery have undergone in our day, and it would no doubt be an interesting and profitable exercise to consider in detail the individual steps and the order and manner in which they have been laboriously accomplished, and to call the roll of the leaders who, in many lands, have headed the victorious army in its ceaseless march from victory to victory. But time forbids. I hope and believe, however, that brief, fragmentary, imperfect as this little glance backward and around us over the field of action has been, it still may be regarded as sufficient to justify us in appreciating, on the present occasion, the concluding words of the address of which so free use has been made at this time: "In conclusion, Mr. President and gentlemen, I beg to express my hope that from what has been said surgery will not appear to have stood still or pursued a retrograde course during the last forty years; but, on the contrary, to have been improved in many important points of practice, and to hold out the prospect of further advance, so that when forty years hence some senior member of the association shall take a similar retrospect, he will find no lack of materials for illustrating the march of progress."

One more prophetic utterance made at or about the same time by one of Syme's own colleagues (Sir James Y. Simpson) I feel compelled to quote here, although its scope is not limited to the field of surgery, but extends to larger and more indefinite departments—in all of which we, as members of the medical profession, have a strong and direct interest.

It may be, also, that the day will yet come when our patients will be asked to breathe or inspire most of their drugs instead of swallowing them, or at least when they will be changed into pleasant beverages instead of disgusting draughts and powders, boluses and pills. But that day of revolution will not be fully realized till those distant days when physicians—a century or two hence—shall be familiar with the chemistry of most diseases; when they shall know the exact organic poisons that produce them, with all their exact antidotes and eliminatories; when they shall look upon the cure of some maladies as simply a series of chemical problems and formulæ; when they shall melt down all calculi, necrosed bones, etc., chemically, and not remove them by surgical operations; when the bleeding in amputations and other wounds shall be stemmed, not by septic ligatures or stupid needles, but by the simple application of hæmostatic gases or washes; when the few wounds then required in surgery shall all be swiftly and immediately healed by first intention; when medical men shall be able to stay the ravages of tubercle, blot out fever and inflammations, avert and melt down morbid growths, cure cancer, destroy all morbific organic germs and ferments, annul the deadly influences of malaria and contagions, and by these and various other means markedly lengthen out the average duration of human life; when our hygienic condition and laws shall have been changed by state legislation so as to forbid all communicable diseases from being communicated, and remove all causes of sickness that are removable; when the rapidly increasing length of human life shall begin to fulfil that ancient prophecy, "The child shall die an hundred years old"; when there shall have been achieved, too, advances in other walks of life far beyond our present state of progress; when houses shall be built and many other kinds of work performed by machinery, and not by human hand alone:

when the crops in these islands shall be increased tenfold, and abundance of human food be provided for our increased population by our fields being irrigated by that waste organic refuse of our towns which we now recklessly run off into our rivers and seas; when man shall have invented means of calling down rain at will; when he shall have gained cheaper and better motive power than steam; when he shall travel from continent by submarine railways, or by flying and ballooning through the air; and when, to venture on only one illustration more, tiresome surgical addresses shall be no longer required to be written by long-winded so-called orators, nor listened to by the long-suffering and uncomplaining members of associations.

These utterances unquestionably seemed altogether Utopian at the time they were breathed forth by their gifted, far-seeing author; but from what has already been realized in the direction here indicated, are we not justified and encouraged to looked to the future with the keenest feelings of hope and confidence, as well as to the past with equally lively feelings of pride and gratitude; for who shall presume to say, so far as the march of modern scientific medicine and surgery is concerned, "Thus far shalt thou go, and no farther"? For my own part, Mr. President, I have long felt that our profession, as such, has been entirely too modest. Like true worth in general, it has refrained from asserting itself and demanding the power and position justly due it. The irresistible logic and force of facts and circumstances, however, are working many deeply important changes on men and things, and to the watchman on the watch-tower nothing is more obviously perceptible among the coming events of the near future than the promotion and elevation of the medical profession to a position of eminence and power which its intrinsic greatness and vital usefulness justly entitle it to.

QUACK MEDICAL ADVERTISEMENTS IN THE LAY PRESS.—We are told by the *British Medi-Journal* that the *London Times* recently refused a four-column advertisement, of the value of £400 from the "Harness Electropathic Belt Establishment." We fear that amount would capture a lot of newspapers in Toronto.

THE THERAPEUTICS OF ASIATIC CHOLERA.*

BY I. E. ATKINSON, M.D.,
Professor of Materia Medica and Therapeutics, University of Maryland.

(STENOGRAPHIC REPORT BY W. T. WATSON, M.D., BALTIMORE.)

It must have occurred to most of us, in listening to the very succinct and exhaustive statements of Dr. Latimer regarding the geographical distribution of this great modern scourge of our race, with a good deal of humiliation, that the art of which we are practitioners has had very little to do in bringing about the subsidence of these various epidemics and pandemics. The epidemics seem to have spread through most countries at their own sweet will, and to have subsided for reasons which are largely beyond our powers of recognition. But while we have never had a remedy that has a definite antagonistic influence over the progress of this disease, a careful observation of the laws of hygiene places a community fairly beyond the reach of its ravages. Undoubtedly, as we all know, the number of vaunted specifics for the treatment of cholera are more than we care to consider to-night. After a brief experience with these remedies, the results of which were phenomenal in the hands of certain observers, the rose-colored reports that were given have failed to be confirmed. I will not attempt to enumerate the various specific remedies, so-called, that have been brought forward from time to time, but will begin my subject, basing my remarks upon knowledge of the disease made more definite by the discovery of the comma bacillus by Koch. This discovery, while it has placed in our hands as yet no specific treatment, has given us very definite ideas of the difficulties we have to contend with, and the indications for treatment and for the administration of remedies, if we be so fortunate as to find them. To enumerate *seriatim* the indications for the treatment of cholera, our first subject is the limitation of the development of the organism that is the cause of the disease; and this therapeusis is directed to the alimentary canal. The second indication is the neutralization of the poison that is produced by the vital activity of these organisms in the intestinal canal. The third indication is the elimination as early

* Read before the Clinical Society of Maryland, Nov. 4th, 1892.

as possible of the poison from the blood into which it has gained access from the intestines. The fourth indication is the restoration of the blood to its normal condition; that is, to its proper degree of fluidity. It is very easy to state these therapeutic indications, but it is far more difficult to supply the therapeutic measures. Still, with the knowledge we have of the nature and the operation of the disease, and the conclusions we draw with regard to the poison which the organisms produce, we are infinitely more favorably situated for struggling with the disease than we have ever been before.

In the space which I have a right to occupy, I can only say a few words in regard to the prophylaxis of cholera. That, however, is the most important aspect of the case. I shall begin with the bedroom of the patient, his house, his surroundings, and the disposal of excreta. Most of this I can dispose of in a very few words because of our knowledge of antiseptics and the influences of minute organisms in the production of disease, which is the alphabet of prophylaxis. Still, it may be proper to speak a little in regard to the exact procedures that should be followed out in case of cholera in the household. The attendants of the patient should be limited. The bed should be prepared in such a way that no permanent contamination of the bedding can take place. For this purpose a waterproof blanket should be spread upon the bed and another upon the floor under it, that discharges shall not soil the carpet or flooring. The attendants should be clad in waterproof clothing. Antiseptic liquids should be at hand, and there should be a constant washing of hands. Attendants should be strictly instructed not to convey their hands to their mouths, and not to feed themselves with their hands. They should use mouth washes and antiseptic solutions of weak strength snuffed into the nose. With regard to the water and food supply, I should speak more definitely. Of course every one knows that the drinking water should never be used unless it has been thoroughly and recently boiled. In passing, I should say I do not regard our Baltimore water supply as at all beyond suspicion. From my personal knowledge of the condition of Lake Roland and of its affluents, and the amount of sewage and drainage that goes into it, I believe that under proper conditions it may be a source of danger. The gunpowder water supply I regard as being as nearly perfect as can be had. The water should be absolutely boiled. The food of the patient should be freshly prepared and cooked. Uncooked fruits of all kinds should be avoided. Milk should be especially avoided, unless recently boiled in a sterilizer. The food should be of a plain nutritious character, but it should not be long free from the necessary amount of heat to destroy the activity of the bacillus.

Passing a little more into the specific conditions, let me say that experience seems to show that a healthy digestive apparatus is a fairly good guarantee against any attack of cholera. Those persons suffering from organic derangements are the persons who are most prone to develop the symptoms of cholera, so far as we know. It is claimed, I know not with how much truth, that the natural healthy acid secretion of the stomach is inimical to the development of the bacillus. It goes without saying that the excreta should be properly disinfected. For this purpose various agents are recommended. An ordinary five per cent. solution of carbolic acid seems to be most popular, and we are advised that the excreta should be allowed to remain in this solution for some time before being thrown out. Ordinary commercial sulphuric acid, three or four drachms to be added to each stool, is recommended. The various corrosive sublimate solutions can be employed.

Suppose the precautionary measures have been unavailing, and we have the patient in the condition of preliminary diarrhœa of cholera. This is an uncertain condition. Unquestionably, in cholera epidemics diarrhœas are very prevalent. Often they are of no consequence; often, after a time, they develop into true cholera. The outcome we cannot always foretell, and we should carefully treat the diarrhœa. Nearly all recommendations for treatment of this preliminary diarrhœa include opium. This seems to have been a universal practice, and unquestionably it is an excellent practice in the ordinary diarrhœa which may not be choleratic; but whether this plan of treatment is efficient in true choleratic diarrhœa is a point upon which I am not prepared to speak with conviction. Certain it is that nearly all observers at the present time

condemn opium in the treatment of cholera; not hesitating to use it to relieve extreme pain; but as a remedy for the treatment of cholera itself, it is condemned. I read an article yesterday evening by Sir George Johnson, in which he observed that in some of Koch's experiments he was not able to produce cholera in rabbits experimentally until he had first given them opiates. At all events, whether the use of opiate preparations in the preliminary diarrhœa of cholera is to be recommended or not, there seems to be almost a universal sentiment among recent observers that opium is not the proper remedy to employ in the developed disorder. Many authorities recommend that the preliminary diarrhœa of cholera should be treated by purgatives, and that if opium is given in those cases it should always be in association with a purgative, and experience seems to show that castor oil is the most efficient of these. The castor oil is given with more or less persistence during the treatment of the diarrhœa. Of course the patient should be kept in bed until the diarrhœa is cured.

The use of acids has been very much recommended in these preliminary conditions. It is claimed that the acid condition of the stomach is inimical to the development of cholera, and it has seemed that this antagonistic condition of the stomach might be increased by giving the proper acid; therefore small doses of hydrochloric acid and other mineral acids are given, and with a fair degree of justification. But these are merely accessory means for combating the choleratic diarrhœa in the initial stage.

I approach now a drug that has been recently recommended as a specific for cholera; and certainly, if we could rely upon the statements (and we all know how unreliable statements made from a few observations are), we might well suppose that in this remedy we have one that has a specific influence in antagonizing the poison. This drug is salol. Lowenthal has written extolling its use. Gonzales lost only three patients in fifty-three cases of cholera treated with salol. Nicholson treated thirteen cases; all recovered. Hehir treated eighteen cases with corrosive sublimate with a mortality of 44.7 per cent.; eleven with salol without a death. If the list went on as this starts, we would have every hope of having a specific in cholera as we have a specific in malarial fever, or syphilis, or acute rheumatism; but recent reports, especially from the hospitals of Hamburg, during the epidemic, from a number of physicians, declare that salol gave no good results whatever in their hands. While at the present time we are not prepared to deny a specific influence to salol, we are not prepared to accept it as a specific, or a remedy that exerts a pronounced influence over the course of the disease. It undoubtedly has a disinfecting influence on the intestinal canal, and I am inclined to think that I will use it if I have to treat cases of cholera.

The causes of death in cholera seem to be due, first of all, to the loss of fluid from the body, and, in the second place, to the chemical substance generated by the bacillus, which acts as a poison on our bodies. Now, the effort to meet this indication has called forth certain novel methods of treatment which seem to promise a great deal. The practise of what is called "enteroclysis," it is claimed, gives marked results in the treatment of cholera. This practice has it greatest advocate in Cantani, of Naples, although he was not the first to practise it. It has received its highest praise from him, and its most extensive application has come from his description of its use in this disease. He claims that under this enteroclysis and the method of injection of a saline fluid under the skin—hypodermoclysis—to have had 70 per cent. of recoveries. What is enteroclysis? We are told that in the very early stages of cholera there should be injected into the rectum a fluid containing tannic acid, because this acid exerts an astringent influence on the mucous membrane of the bowel, and also has a destructive action upon vitality of the bacillus. From five to twenty grammes should be used to the liter of water, or about 75 to 300 grains to the quart of water, at a temperature of two or three degrees above the normal temperature of the body. The injection is allowed to run in slowly, and is frequently repeated. This succeeds in washing out to a considerable extent the large intestine, and Cantani claims—and there, I think, we will be disposed to question the accuracy of his claims—that the fluid goes beyond the ileo-cæcal valve. I doubt whether the liquid can be made to reach beyond the

ileo-cæcal valve, or, if so, then only in very small quantities. This doubt cannot but make us feel some hesitation as to the accuracy of other statements. At first this solution of tannin was made in effusion of chamomile. I do not think that any one can claim any specific virtues for the chamomile; and it seems to me that inasmuch as in the cholera we should lay aside everything that will embarrass our action, then, unless chamomile has a therapeutic value, we should dispense with it. Then, too, a certain amount of tincture of opium, 30 to 50 drops, may be added to the injection. But, so far as I can discover, the essential agent is a solution of tannin in warm water. As the algid stage comes on and the patient begins to lose, by vomiting and purging, enormous quantities of water and fluid characteristic of the disease, this enteroclysis is supplemented by hypodermoclysis; and that consists in introducing under the skin a solution of common salt, the normal salt solution of about 75 per cent., or one may use a teaspoonful in a quart of water. According to Cantani's recommendation, it is combined with carbonate of sodium. One may use a drachm of chloride of sodium and forty-five grains of carbonate of sodium to a quart of water at 39 degrees centigrade. This is introduced by means of a canula into the subcutaneous tissue, and usually in the ileo-costal region. The canula is introduced, the fluid is allowed to run in under gentle pressure through tubes and vessels that have been carefully antiseptisized. The pressure is so gentle that it will take from 30 to 50 minutes to run in. Instead of having only one point, it is desirable to divide the fluid into equal quantities and run it into different parts of the body. This forms tumors which gradually disappear. This method, it is claimed, and especially in the Hamburg hospitals during the last epidemic, has done marvels, and has brought people right up from the very jaws of death. But further observations amongst those who practised amongst the cholera patients in Hamburg seem to place the intravenous injection of this fluid above the hypodermoclysis. Quite a number of physicians have concluded that intravenous injections produced results marvellously greater than those of the hypodermic injections. I remember a statement that one physician made that where a patient had been brought out of a state of collapse by the intravenous injection of the saline fluid, and falling again into collapse, the hypodermic injection did not succeed in restoring him as the intravenous injection did, while the intravenous injection again and again would bring the patient out of this condition. It seems, from a purely theoretical point of view, that those intravenous injections should not produce results so marvellously better than the other. By this method one runs the risk of thrombosis, and of introducing other substances into the veins. Such results, however, did not occur in Hamburg. If there is any power of absorption in the connective tissues at all, and if it can be shown that this fluid is taken up, it would seem reasonable that there should be this marvellous difference. In the discussion, a number of other speakers preferred intravenous injection. When the algid state seems to be past and the patient passes in the typhoid state of cholera, it is recommended that enteroclysis be again resorted to, not with tannic acid, but with saline solutions, for the purpose of restoring the blood to its proper condition. These solutions may begin with from two to five grammes to the liter, from one to two drachms to the quart, and they may be increased until the proportion of salt in the solution may approach fifteen or twenty per cent. This should be used along with the hypodermoclysis or intravenous injection of the saline fluid. Recently, arterial injection has been recommended; but I have not been able to find any reliable data about it, and therefore I only refer to it.

This constitutes what seems to be the most promising treatment of Asiatic cholera, and nearly every one who has practised it speaks of it in terms of praise.

I want to refer again to the point that opium not only seems not to have a beneficial, but to have a positively meretricious influence over the course of Asiatic cholera. I wish to refer again to the statement that the results in the treatment of cholera in earlier years when calomel and castor oil were used appear to have been better than they were under the treatment by opium. Certainly the treatment of cholera in earlier years by calomel and castor oil appear to have been better than they were under the treatment by opium. Certainly the treatment of

cholera by opium and by the various mineral and vegetable astringents does not give a percentage of cures that in any degree encourages us to persevere in their use. Here we have a method that is under trial. It is certainly worth careful investigation, and I am sure that if I were called upon to treat cases of cholera to-morrow I should at once put this method of treatment into practice.

Selections.

SYMPHYSIOTOMY, WITH THE REPORT OF AN OPERATION.[1]

BY BARTON COOKE HIRST, M.D., PHILA.

Symphysiotomy has as remarkable a history as any procedure in surgery. Suggested for the first time in the *Surgery* published by Pineau in 1598, and first performed upon a living woman in 1777, the idea may be said to be three hundred years old, while its practical application dates back more than a century.[2] From the year of the first operation until 1858 symphysiotomy was performed 85 times in different parts of the continent of Europe, and once in England, with a mortality of 33 per cent. The frequency of the operation diminished after the first few years, until in 1858 it had practically died out. It was revived, however, in Italy in 1866, and in the succeeding twenty years seventy operations were performed, with a mortality of 34 per cent. Italy continued to be the exclusive field of the operation until a year ago, when it was again tried in Paris by Pinard, whose interest in it was aroused by a visit of Spinelli from Italy. Ten operations have since been performed in Paris, two in Dresden, and one in Strassbourg. From January 1, 1866, there have been fifty-two operations, with only a single death, due to septic infection before the operation was undertaken. Twenty-three symphysiotomies have been done already this year; and the last thirty-four women have all recovered.

We owe the introduction of symphysiotomy into this country to Dr. Robert P. Harris, who, as is well known, has long been interested in the subject, and at the recent meeting of the American Gynecological Society in Brooklyn read a paper tracing the development of the operation, showing by the most laboriously collected statistics the present brilliant results achieved by it, and demonstrating, by the description of typical cases, its utility in labors otherwise insuperably obstructed by a contracted pelvis.

Ten days after Dr. Harris' paper was read, on Saturday, September 30th, the first operation in this country was performed by Dr. Charles Jewett in Brooklyn. Three days later, it was again performed at the Maternity Pavilion of the University Hospital in this city.

The position of symphysiotomy is now established beyond a doubt. Its modern revival I believe to be the most important advance in obstetric surgery since the general adoption of abdominal section for the treatment of early extra-uterine pregnancy. It is applicable in contracted pelvis with a conjugate over 67 mm., and, therefore, should be the method employed in almost all cases of the kind in this country, for a greater contraction of the pelvis is rarely seen among us. It should, moreover, almost entirely displace the Cæsarean section for a relative indication. It is a much simpler, an easier, and a safer operation. This is also the opinion of Leopold, who cannot be accused of prejudice against Cæsarean section, with his brilliant record in that field.

There is and will be for some time, perhaps, an objection to the operation from those who have no experience with it, on the ground that sufficient space cannot be thus gained. In answer to this objection is the fact that the pubic bones may gape 7 cm. after separation, and the statment of Morisani, that the conjugate is thereby increased from 1.3 to 1.5 cm. But an absolute conclusive answer is furnished by the subjoined clinical records of some typical cases.

Leopold's first case.[3]—A dwarf, 135 cm. tall, with the following pelvic measurements: Sp. il. 22 cm.; cr. il., 24 cm.; tr., 28 cm; conj. ex., 17½ cm.; conj. ding., 8¾ cm.; conj. vera, 6¾ cm. She had been delivered twice previously, twice of dead children, one by the induction of premature labor. After a labor of seven hours and twenty minutes, ushered in by rupture of the membranes, symphysiotomy was performed with

1 Read before the Philadelphia County Medical Society, Oct. 12, 1892.

2 R. P. Harris; Amer. Syst. of Obstet., vol. ii.

3 *Centralbl. f. Gyn.*, 1892, No. 30.

the head above the brim. In ten minutes the child was extracted with forceps. The head was of normal size (transverse, 9¾, 8¼; circ., 34).

Leopold's second case.[4]—A woman delivered once by craniotomy. The pelvic measurements were as follows: Sp. il., 22; cr. il., 25; tr., 30½; conj. ext., 16; conj. diag., 8½; conj. vera, 6¾. Labor began in the evening; membranes ruptured seven hours later; operation three hours later with head above the brim. Extraction of the children in ten minutes with forceps. The head had a circumference of 35¼ cm.

Porak's Case.[5]—A primipara with rachitic pelvis, conjugate diagonalis being 9.6 cm., and pelvis presenting some asymmetry, very likely from scoliosis. Labor began on June 10th. About twelve hours later the membranes ruptured, and from eight to ten hours afterward the os was completely dilated. The head rested above the brim of the pelvis. Forceps were applied, but all efforts to engage and extract the head failed. The symphysis was opened, and the head then extracted "with the greatest ease" by forceps. Recovery.

Freund's Case.[6]—A woman, in labor six days; water drained off for two days. After opening the symphysis, the head was delivered in fifteen minutes without instruments. There were two previous deliveries, one of a dead and one of a living child. The pelvic measurements were: Sp. il., 24½; cr. il., 27; tr., 31; conj. ext., 18½; conj. diag., 10 cm.; conj. vera, 8¼. The child's head after birth was found unusually large and hard. B. T., 10 cm.; B. P., 11 cm.; F. O., 12 cm.; M. O., 14 cm.; S. B., 10 cm. Circumference, O. F., 37cm. Recovery.

Jewett's Case.[7]—The first symphysiotomy in America, performed by Dr. Charles Jewett, of Brooklyn, September 30th, 1892. Woman, a native American, primipara, fell into labor September 30th, one o'clock a.m.; the occiput appeared at the vulva, but was held fast by an approximation of the ischiac tuberosities, reducing the bisischiac diameter to three inches. Nine hours later Dr. Jewett first saw the patient. The forceps had been vigorously used in vain. Symphysiotomy was performed two-and-one-half hours later, or eleven-and-one-half hours after the impaction of the head at the outlet. Delivery was effected by suprapubic pressure, and by shelling the head out with the fingers in the rectum. The woman is now in good condition, but unfortunately the child died twenty-four hours after birth from the compression to which the skull had been subjected during its long impaction in the pelvis.

The University Maternity Case.—A German woman, aged nineteen, pregnant for the first time, was admitted to the University Maternity, September 24th. The examination by the resident physician and the students showed the child to be presenting by the head, the back to the right. The pelvic measurements were: Sp. il., 25 cm.; cr. il., 27 cm.; tr., 30½ cm.; conj. ex., 18 cm.

The internal examination made by myself just before the operation showed the conjugate diagonalis to be 9½ cm.; conj. vera., 7¾ cm. The girl fell in labor Saturday morning, October 1st. The pains, recurring all day, on Sunday became very vigorous. On Monday morning, when my attention was first called to the case, the contracting-ring was high, the uterus stood almost straight out from the body, and the child's head was movable above the superior straight. The membranes were unruptured. By no justifiable degree of force could the head be made to enter the pelvis. The fœtal heart-sounds were good. It was evidently, therefore, a choice of Cæsarean section, craniotomy, or symphysiotomy. This last was done with the assistance of Dr. R. C. Norris and the valuable advice of Dr. R. P. Harris, who kindly consented to be present. The child was delivered with forceps in one hour and four minutes from the time the operation was begun. I purposely took my time, for the os was only the size of a dollar, and was very rigid, so that a more rapid extraction would have seriously injured the cervix. Head measurements: B. T., 7½; B. P., 9; F. O., 12; M. O., 13½; circ., 34. Mother and child are well.

The technique of symphysiotomy is simple and easy. After thoroughly cleansing the field of the operation and disinfecting the vagina as well, a short vertical incision is made on the

4 *Centralbl. f. Gyn.*, 1892, No. 30.

5 *Annales de Gynecologie*, Sept., 1892.

6 Mullerheim: Ueber die Symphysiotomie," *Centralbl. f. Gyn.*, 1892, No. 30.

7 Personal communication.

abdominal wall, reaching to about three-quarters of an inch above the symphysis. The attachments of the recti muscles are severed just sufficiently to admit one finger. The forefinger of the left hand is passed under the symphysis, and upon this, as a guide, the curved knife of Galbiati is inserted until its beak projects under and in front of the symphysis. The joint is then cut upward and outward. To avoid injury to the urethra, a metal catheter is inserted and pressed by an assistant downward and a little to the right, while the knife is placed a little to the left; but with Galbiati's knife I should think that there is little likelihood of cutting the urethra or the plexus of veins in its neighborhood. I at first thought that an ordinary probe-pointed curved bistoury would serve my purpose well enough, but I quickly laid it aside, and was glad to avail myself of Galbiati's knife, which I happened to possess — at that time one of three, I believe, in the country.

As soon as the joint has been severed, the wound should be covered with iodoform gauze, and then the child extracted with forceps, or allowed to be delivered naturally, as seems best in the individual case. I should, I think, almost always prefer the forceps. It is well to have trochanters supported by assistants during the passage of the child through the pelvis, so that the sacro-iliac joints shall not be injured.

As soon as the delivery is completed the wound is sewed up, the lowest stitch, if desired, passing through the top of the symphysis. How the whole symphysis can be stitched up, as Leopold claims to have done, I do not understand. After closing the wound and dressing it, rubber adhesive strips are placed around the hips and the lower abdomen, and a tight binder applied. The symphysis unites surprisingly soon, and three weeks after the operation the patient can walk as firmly and well as ever.

There is only one disturbing thought in connection with the introduction into this country of an operation destined to do much good. The charge of superficiality lies with some justice against us. We are too ready to reach out toward the top without a sufficient basis of solid preparation, and I fear that symphysiotomy may be undertaken by many who cannot measure a pelvis, and who have not the experience to decide whether a head can pass through the pelvis in which it is about to enter, or in which it is engaged. There is consolation, however, in the reflection that if symphysiotomy should be done needlessly the results are not likely to be so disastrous as in the case of Cæsarean section, which, to my knowledge, was done several times unnecessarily during the excitement produced among medical men by the improved results of the Sänger operation.—*Maryland Medical Journal.*

THREE CASES OF EXTRA-UTERINE PREGNANCY.

The following cases are reported from their individual interest, and also in the hope that a lesson may, perhaps, be drawn from them:

Case 1.—Mrs. L., aged 25, has one child four years old. Since the birth of this child, she has suffered from periodical attacks of severe abdominal pain. Sometimes the attacks of pain were so severe that she would faint; they were most likely to occur during a movement of the bowels. On my first visit I found the patient with severe pain, limited to the lower segment of the abdomen. The belly was tense and swollen. Her temperature was 100°. Vaginal examination revealed a tumor in Douglas' pouch which was exquisitely tender to the touch. Inquiry elicited the history of a rather irregular, painful menstruation. Three months previous the flow had ceased. Two weeks before the first visit, however, the flow had reappeared. An enema of glycerine, turpentine, and salts was ordered, with the result of almost immediate and entire relief from pain. On the next visit the tumor persisted, but it was less painful to pressure. This same evening there was a sudden attack of pain. I was summoned, but did not reach the house until several hours after the beginning of the pain, and found the patient blanched, pulseless, with an abdomen full of liquid. She died before an operation could be undertaken. At the *post mortem* next morning, the abdomen was found filled with fluid and clotted blood. Both ovaries were bound down posteriorly to the uterus with old adhesions. The fimbriated end of the right tube capped a mass which was the size of

a hen's egg, and had the appearance of a placenta. It was ruptured at its lower outer extremity. On dissection, it was found to contain a cyst enclosing a small, perfect embryo.

Case 2.—Mrs. C., married four months, had missed one menstrual period. At the time for the next period, she had severe abdominal pain and a slight flow. The flow continued, with recurring abdominal pains of great severity. Suddenly, on retiring, she was seized with unusually severe pain and a faint feeling. Then, for the first time, she called her physician, Dr. Joseph V. Kelley, who recognized the condition and sent for me. A tumor was present posterior to the uterus, which was painful. Both being agreed that we had to deal with a ruptured extra-uterine pregnancy, I drove into the city in haste for Professor B. C. Hirst. We reached the house at 6 a.m., several hours after the rupture, and at once began a laparotomy. The right tube was found to be the seat of an extra-uterine pregnancy, from which a well-formed fœtus 1½ inches in length had escaped. The tube was tied and the mass removed; bleeding, however, persisted after the stump was repeatedly tied at successively lower points. The pelvis was then packed with iodoform gauze and the bleeding thus controlled. The patient sank, however, and died one hour after the operation.

Case 3.—Mrs. W., was married April 27th, 1892. She had two normal menstrual periods after marriage. On June 30th, two weeks after the last menstruation, she had a sudden profuse gush of blood, which lasted but a few minutes. In four days she had a second similar flow—both of these without pain. In a few days the flow again commenced, and continued until July 29th; it was never profuse after June 30th. Early in July the patient had severe cramp-like pains, confined to the lower part of the abdomen. Sometimes these attacks of pain were of excruciating severity, but the pulse was never hurried nor weak. Repeated examinations of the uterus found it to be movable and painless, and apparently slightly enlarged. No tumor could be demonstrated after the most careful examination. On July 26th an unusually severe attack of pain occurred, this time accompanied by excessive tenderness of the vagina and uterus, and at this examination a tumor was found posterior to the uterus. There was slight rise of temperature.

Dr. B. C. Hirst was called, and confirmed the diagnosis of extra-uterine pregnancy. A laparotomy was done on the 29th of July, and the right ovary and tube removed. The tube was found occupied by a mass resembling almost completely a uterine fleshy mole. It was about the size of a hen's egg. No embryo could be demonstrated. The patient made an uninterrupted recovery.

All three of the above cases had irregular menses. In two there was a history of missed periods—in the first case two; in the second one, with a subsequent flow continuing over a considerable period. In the third case, though no period was missed, the flow began too soon after the last menstrual period, and continued four weeks.

Pain was present in all the cases; it was severe, of lancinating character, and confined largely to the lower part of the abdomen. A tumor was present in all three of the cases; its position was posterior to the uterus; it was tender to pressure. Fever was present to a slight degree in cases one and three. Case two was seen too late to determine its presence or absence.

Two of the cases were primiparæ. The first cases had not given birth to a child for four years. It would seem that irregular menstruation; a long-continued flow, or the missing of one or more periods followed by a flow; the presence of a painful tumor posterior to the uterus; severe pains like those of peritonitis occurring in the lower part of the abdomen, especially if occurring in a primipara, were almost positive signs of an extra-uterine pregnancy. Certainly, the signs are such as to warrant a laparotomy. If I had called a surgeon at once to remove the tumor from case one, she probably would be alive to-day. If I had hesitated in a like manner in cases two and three, they would have both died, the one without the proper effort having been made to save her life. Case one demonstrates how dangerous delay may be where the above symptoms are present, even though there are good grounds for supposing the tumor to be entirely inflammatory in character. My advice would be, where there is irregularity of menstruation,

pain, and a tumor posterior to uterus, laparotomize without delay; for while perchance the tumor may not be an extra-uterine pregnancy, it is foreign to the part, and should be removed. To allow a patient to die from rupture of a tube, with such an experience as the above, is little less than criminal.—M. H. Fussell, M.D., Chief of University Medical Dispensary.—*Univ. Med. Mag.*

CORROSIVE SUBLIMATE A POOR GERMICIDE.—Klein's statement, made in 1884, that mercuric chloride was of no more germicidal value than vinegar, has certainly received confirmation in the experiments of Mr. Charles T. McClintock, published in the *Medical News* for October 1st and 8th. In his studies regarding the value of corrosive sublimate as a germicide, he not only found that vinegar containing from 6.3 to 7 per cent. of acetic acid had as much influence in inhibiting the growth of microorganisms as a 1-to-1000 solution of corrosive sublimate, but, furthermore, that the *staphylococcus pyogenes aureus*, the *bacillus subtilis*, Eberth's bacillus, and germs in fæces would withstand the action of a 1-to-1000 solution of corrosive sublimate from an hour to forty-one hours.

The general use of this poison as an antiseptic has been based on Koch's statement, in 1881, that a single application, for a few minutes, of a solution of the strength above specified would, without any previous preparation of the object to be disinfected, produce absolute disinfection of even the most resistant organism. This dictum has been corroborated by several bacteriologists.

Now Mr. McClintock, who seems to have conducted his experiments quite carefully, concludes that the high rank heretofore given corrosive sublimate as a germicide is without warrant, and based on faulty experiments. These faults have been, in the main, two: Enough of the sublimate was carried over with the disinfected material to act as an antiseptic; secondly, the sublimate formed, with the investment of the germ, an organic compound that, especially with the use of solid media, acted as an antiseptic, and the false conclusion was deduced that the germ was dead. Sublimate forms with cellulose (cloth, filter-paper, etc.), with silk, with albuminous bodies, and with some portions of bacteria (probably the envelope) a chemical compound that no amount of washing with water will remove. The capsule it forms about a germ not only protects the germ from the further action of the sublimate, but also forms an impenetrable barrier to the growth of the germ. The latter may be removed by salines, especially those in the blood. He also concludes that, while sublimate has no great germicidal power, it does not follow that it is not a valuable disinfectant, though it remains to be proved whether the germs contained in solutions treated with sublimate, and disposed of as such material usually is, do or do not grow.

These experiments justify the commendation that has been given in these columns of the employment of lye and solutions of quicklime as the best domestic antiseptic agents.—*N. Y. Med. Jour.*

THE PATHOLOGY OF PUERPERAL ECLAMPSIA.—At the recent Gynecological Congress at Brussels, Chambrelent introduced the results of some new experiments upon the subject of the pathology of puerperal convulsions. He said that the malady was generally considered as the outcome of auto-infection. Nevertheless recent observations, especially those of Bouchard in France, had shown that in this affection the urine was often concentrated, and contained only a small proportion of toxic elements. Being interested in the latter fact, the author undertook some control experiments with the view of determining whether, for example, the blood of women suffering from puerperal eclampsia showed any increase of toxic elements. From six patients suffering from this disease blood was taken, and with it twenty different experiments were made. In all the experiments, the toxicity of the blood serum from the patients in question was much greater than that which Rummo has proved it to be the case where the blood has been obtained from healthy persons. According to Rummo, 10 c.c. of healthy serum is sufficient to cause the death of a large rabbit, whereas in the experiments performed by the author from 3 to 6 c.c. were all that was necessary to bring about the same result. The experiments fur-

ther pointed out that the toxicity of the serum in these puerperal cases varied inversely with the amount of toxic elements in the urine. When, moreover, the degree of toxicity of the serum was high the case was always certain to assume a very grave aspect, as far as prognosis was concerned.—*Med. Press and Circular.*

THE EARLY DIAGNOSIS OF UTERINE CANCER.—Laroyenne (*Journal de Médecine de Paris*) states that whenever the finger nail can bring away portions of the cervix or of the uterine mucosa, it is perfectly safe to say the condition is one of epithelioma, and no ordinary endometritis. This procedure is so simple and reliable that microscopic examination is practically unnecessary.—*N. Y. Med. Jour.*

THE
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TORONTO, DECEMBER 1, 1892.

PNEUMONIA TREATED BY ICE-COLD APPLICATIONS.

In the October issue of *The Therapeutic Gazette* (Phila.), an article on the above subject appeared from the pen of Dr. W. Fred Jackson, of Brockville, Ont. In it he details the experience of some twenty-five cases treated by ice-cold applications during last winter, and with most favorable results. All the cases recovered with great promptitude except two, of whom one died. Of these two, one case was secondary to la grippe, and was much prolonged by the coincidence of fibrinous pleurisy, but eventually made a good recovery. The one who died was a woman who had led a dissolute and intemperate life, and as there was coincident peritonitis, and albuminuria, due—as *post mortem* proved—to cystic degeneration of both kidneys, the fatal event was a foregone conclusion. Even in this fatal case, great relief from pain and fever was secured by the cold applications. The pathological considerations upon which this treatment is based are:

(1) That pneumonia is a specific fever, in which the lesion of the lung is but an incident. The pneumonic fever is in full operation for a considerable period in advance of the consolidation of the lung, which latter is the effect of the development in the blood of the specific pneumococcus, owing to the height of temperature favorable to its growth.

(2) That the danger to life is in direct proportion to the magnitude of the lung lesion, and depends upon it.

(3) That in all febrile diseases there is deficient elimination of caloric, as well as excessive evolution of it.

The contention advanced is that the application of cold removes the conditions favorable to the development of the pneumococcus, and aborts the disease; not only so, but stops it in mid-career.

The method of application employed was by means of thick towels wrung out of ice-cold water, and covered with a pin-bandage, the towels being reapplied as often as they approached the body heat. The medication consisted of large doses (℥j. vel. ℥ij.) liq. ammonii acetatis, with spts. etheris nitrosi (℥ss. vel. ℥j.), well diluted, every hour. Pilocarpin was used in one case where the former failed to produce a critical perspiration. The face and limbs were also freely sponged with cold water. There was practically no expectoration, a free diuresis following the perspiration, with coincident clearing up of the pulmonary symptoms and rapid subsidence of the fever.

The patients ranged in age from an infant of two years to aged persons of seventy-four. The writer does not consider his cases sufficient in number to tabulate, but thinks the results observed cannot be obtained by any other means. This opinion is based upon the experience of twenty years. He mentions cases reaching normality in 30 to 60 hours. Dr. Jackson enjoins the fearless application of the cold water, with a firm hand, watching the pulse and temperature, and endeavoring to secure the critical perspiration and diuresis, and that the towels be

worn as a moist compress about the thorax for twenty-four hours after the fall of temperature as a precautionary measure. As the cold *relieves the pain* and reduces the temperature, he earnestly insists on the avoidance of both opium and the coal-tar antipyretics, as he is convinced they do nothing but harm. Blisters and antimony he places in the same category. Dr. Jackson is, we think, the first in this country to publish any extended experience of this method; but Niemeyer and Preissnitz, in Germany, advocated this line of treatment many years ago, and Dr. Mays, of Philadelphia, has published the results of two cases so treated.

In view of the high mortality observed in the usual treatment of pneumonia, any method giving better results deserves earnest consideration at the hands of the profession. And if this treatment proves upon closer acquaintance to be as successful in other hands as in those of Dr. Jackson, it will undoubtedly be one of the greatest therapeutic advances of the day.

UNIVERSITY SENATE.

The following excerpts from the official report of the last meeting of the Senate of the University of Toronto will doubtless be interesting to our readers:

Faculty of Medicine: Chancellor, Vice-Chancellor, and President *ex officio*, Rev. Drs. Caven and Sheraton, Chancellor Boyd, Prof. Galbraith, Mr. Hoyles, Hon. S. H. Blake.

A division took place on the motion that the names of Prof. Galbraith, Mr. Hoyles, and Hon. S. H. Blake be substituted for Drs. Cameron, McFarlane, and Graham on the committee on Faculty of Medicine, as follows:

For: President, Mr. Houston, Dr. Ellis, Mr. J. M. Clark, Principal Sheraton, Dr. Cameron, Prof. McCurdy, Prof. Pike, Prof. Hutton, Prof. Galbraith, Mr. Hoyles, Dr. Hoskin, Prof. Dale, Mr. Seath, Prof. VanderSmissen, Mr. Spotton, Mr. Henderson, Mr. Ballard—18.

Against: Chancellor Burwash, Dr. Graham, Father Teefy, Prof. Baker, Mr. Moss, Dr. Davidson, Dr. McFarlane, Dr. A. H. Wright, Dr. Aikins, Rev. Dr. Burns, Prof. Bain, Dr. Maclaren—12.

Mr. I. H. Cameron gave notice of motion that the Medical Faculty of the university be requested to appoint an advisory committee to confer with the standing committee on the Medical Faculty on all subjects of a technical character upon which the latter may desire advice.

The committee appointed to strike standing committees in their report had recommended the names of Drs. McFarlane, Cameron, and Graham as members of the committee on the Medical Faculty. Mr. Cameron not only declined to act, but opposed the appointment of any physicians on the committee. A long and rather acrimonious discussion ensued, with the above result. We think there are many reasons why Dr. Cameron should have been on the committee; but, when he refused to act, it will probably be conceded that Mr. Hoyles made an excellent substitute. It is not so clear that Prof. Galbraith and the Hon. S. H. Blake are likely to work better in the interests of the faculty than Drs. McFarlane and Graham. The opponents of the two unfortunate doctors evidently considered them rather dangerous characters, who could not be trusted even with seven fairly competent laymen in a position to watch them, and discussed the matter in a manner that was far from friendly and conciliatory. The spirit that was manifested at the meeting in certain quarters augurs ill for that harmony which many would like to see existing between the various faculties and affiliated institutions.

CYCLING.

In connection with the numerous and diverse opinions which have lately been expressed about cycling, we must recognize the fact that it has become a permanency. Many there are who consider the bicycle an abomination, which has already done much harm, and is likely to do much more in the future. Others think so highly of it that they seem inclined to recommend it to all sorts and conditions of people without any restrictions or cautions.

Most, if not all, of the writers in our medical journals who are able to speak with some authority as practical cyclists agree that this form of exercise is very healthful, when carried out in moderation; but, at the same time, say that unwise efforts in the direction of record-breaking and prize-winning have done, and are

doing, incalculable harm. All will probably recognize the following picture of a certain class of bicycle riders, taken from the *British Medical Journal:* "The individual who, with crooked back and head dangling over the front wheel, tore along, indifferent to the safety and comfort of others, and who was so aptly compared by the observant gamins of London streets with *a monkey on a gridiron.*" It requires no strong arguments to convince most people that this style of cycling is harmful.

After all, it is probable that cycling is, like most kinds of exercises, a source of enjoyment and physical profit to those who practise it, but a source of danger to the weak or immoderate who abuse it. The physician should be very careful in recommending it in many cases. Weak and rapidly-growing children may have crooked shoulders and narrow chests made worse by overriding or assuming faulty positions; and yet these same children may derive considerable benefit by a limited amount of cycling in correct positions.

Dr. Luff, of St. Mary's Hospital, London, Eng., in recommending athletic sports to the students, referred especially to the advantages of the bicycle; but the following words of his will show that he fully appreciates the possible dangers: "I have been a cyclist for sixteen years, and in my earlier athletic days I frequently associated with, and therefore had the opportunities of observing, young men who at that time stood prominent in the athletic world as champions and record-breakers, many of whom, alas, now sleep the long sleep, hurried prematurely to their graves by the insane desire for so-called record-breaking and prize-winning."

The suggestion contained in a quotation from the *British Medical Journal* which appeared in the last issue of THE PRACTITIONER, to the effect that the tricycle is much safer for children than the bicycle, is well worthy of careful consideration by physicians.

MEDICAL STUDENT RESIDENTIAL COLLEGES.

The establishment of residential colleges in connection with the various medical schools of London, during recent years, has been very highly appreciated by the medical students of that city. It is very satisfactory to learn, on the authority of the *British Medical Journal*, that in every instance these colleges have been successful. We have watched the work done in this connection for several years, and have frequently commented on the same. Mr. J. H. Cameron, of Toronto, was probably the first in Canada to direct attention to this subject, while he was on the editorial staff of this journal. We believe he still approves of such institutions.

Apart from him, and a few others who have been or are now connected with THE PRACTITIONER, we do not know that the subject has created any great interest among those connected with medical colleges in Canada. We have often been surprised at this aspect of the case; and think now that it would be a good time for the Medical Faculties of the University of Toronto and Trinity Medical College to take the matter into their serious consideration, and make arrangements to build each a first-class residential college next season. If properly conducted, it is likely, from the experience of those who have tried the experiment in Great Britain, that they will at least pay expenses, and there can be little or no doubt that, if established, they would be of inestimable service to many of our students who leave their homes, and more or less anxious friends, and trust themselves to the tender mercies of the keepers of boarding or lodging-houses. The restraining influences of these residential colleges on many young men under such circumstances must, in many cases, do untold good.

We venture to say that the first medical college that establishes such an institution on a proper basis will find that, apart from the moral aspects of the case, it has made a good business venture.

Personal.

H. H. OLDRIGHT, M.B., '91, has returned to Toronto after an absence of sixteen months. After spending some time in London, he made several voyages as steamship surgeon, and visited Rotterdam, the Hague, Hamburg, the Gold Coast, New Zealand, Brazil, and the Congo, from which last-named district he has just returned, *via* Liverpool and New York.

Hospital Reports.

A CASE IN WHICH LIGAMENT WAS TORN FROM THE PATELLA. BONE AND LIGAMENT SUTURED TOGETHER.

BY DR. MACFARLANE, TORONTO.

Robert McKenzie, laborer, æt. 60, admitted to the Toronto General Hospital on April 18th. Family and personal history are excellent.

While working in a barn on the 17th of April, he slipped through a hole in the floor, the left knee striking the edge of the hole. After the accident the knee became greatly swollen, and the power of extending the leg was lost. On examination, the knee was found much swollen, especially on its inner side, and there was quite an amount of effused blood in the joint. The patella was drawn up by the quadriceps extensor, and the bone could be outlined. By pressing the fingers over the lower part of the patella, they could be forced beneath the lower margin of the bone, showing that the ligament was torn off.

It was decided to open the joint and coapt the parts by means of silver wire.

April 31. The cutaneous tissues over the joint were rendered aseptic by being shaved, and thoroughly scrubbed with turpentine, soap and water, and afterwards with a 1-3000 solution of bichloride of mercury. The instruments were boiled and placed in a 1-40 solution of carbolic acid.

Operation.—The joint was freely opened by a transverse incision five inches long, extending across the front of the limb on a line with the normal level of the lower margin of the patella. On entering the joint the soft tissues were found considerably torn, and the ligament and bone were separated about one and a half inches. After thoroughly irrigating the parts with a 1-3000 bichloride solution and checking all hemorrhage, the bone and ligament were brought together by a single suture of one-twelfth inch silver wire. The torn soft tissues were brought together by carbolized catgut, and the external wound closed with silk. No drainage tube was used. The wound was dressed with iodoform, moist bichloride gauze, and absorbent cotton, and the limb put on a posterior splint, with a foot piece, extending from the upper third of the thigh to the heel.

April 23. Temp. $100\frac{2}{5}°$, pulse 100, very little pain, bowels regular, light diet given.

24th. Temp. again reached 100°, but soon fell, and has not reached the same elevation since. No pain; only a feeling of discomfort in knee. The patient's condition continued most favorable, and on the 29th the dressings were removed and some of the stitches taken out. The swelling and extravasated blood had nearly disappeared, and there was no sign of tension or of pus.

31st. The rest of the stitches were removed, and the wound was found entirely healed.

May 16th. There is no pain or discomfort in the part; the knee is stiff, but there is no sign of inflammation. It is, however, deemed necessary to allow union to become a little more firm before using the limb, so it is still kept on the posterior splint. The general health is excellent.

Correspondence.

UNIVERSITY SENATE ELECTIONS.

Editor of THE CANADIAN PRACTITIONER:

SIR,—The editorial comment on "The Vice-Chancellorship of the University," in your issue of the 16th instant, has just come to my notice, and I hasten to say that, did not our long and intimate association, in matters editorial and other, preclude the notion, I would be disposed to regard it as intentionally offensive. Let me repudiate, then, the credit or discredit attached to your statement that "Dr. (*sic*) I. H. Cameron good-naturedly allowed himself to be the medium for their purposes," and say to my constituents, to many of whom your words will come, that their representative is not weak-minded enough to be actuated by any such motive in a matter where principle is involved. Some members of the Senate felt it to be the duty of the hour, and others a due redemption of pledges made to the electorate, to place themselves on record as opposing Mr. Mulock's re-election; and such was, of course, their inalienable right. Hence, accordingly, when Mr. Mulock's nomination was made, Professor Pike rose and asked the Vice-Chancellor if the yeas

and nays could be recorded on the single nomination; citing, in support of his request to that effect, an extract from Bourinot, showing that, although not usual, it had been occasionally done in both the House of Commons of Great Britain, and the House of Commons of Canada. Upon this point the Vice-Chancellor declined to rule; and my name was at once moved by Prof. Galbraith, and seconded by Prof. Dale. Anxious to avoid the appearance of a personal collision with my old friend, the Vice-Chancellor, but at the same time determined to maintain the right of his opponents to place themselves on record in the Senate's minutes, I then proposed that the Senate should itself affirm the point which the Vice-Chancellor evaded, viz., the right of the minority to have the yeas and nays recorded on the single nomination; but my motion was not seconded, and, after some desultory conversation upon the point, it was thought that it would expedite business to allow my nomination to stand, and take the vote. This decision is, in my humble judgment, to be regretted; not only upon personal grounds, but because I think it would have been well to have established a precedent for recording the vote upon call and single nomination. I understood from yourself, sir, that there would be no difficulty whatever about the matter, and other friends and supporters of Mr. Mulock's to whom I spoke upon the subject that evening likewise concurred in the view that a record of the vote would be quite right and proper, and, therefore, it was with a great deal of surprise and disappointment that I heard Mr. Mulock decline the responsibility of allowing it. That responsibility I had no hesitation in proposing in my motion that the Senate should assume, as a simple act of right and courtesy.

Now, as to the reason for the selection of my name: The opinion of the university professoriate was undoubted, and the verdict of convocation pronounced; but still, in view of the fact that the Senate is a large body, composed of very heterogeneous elements, and the focus of many divergent corporate interests, it was idle to expect that any candidate uniting only the interests first named would be elected; but it was urged that my acceptance of the nomination would contradict the false statement widely disseminated during the late campaign that there was discord between the Arts and the Medical Faculties, and that opposition to Mr Mulock was enmity to the Medical Faculty. Earnestly desiring to disabuse the public of that view, I consented to allow my name to be proposed, but only *in extremis; i.e.*, when it appeared that the minority were in imminent danger of having their rights denied them. To be charged, therefore, with "good-naturedly allowing oneself to be used for a purpose," and that purpose by implication a sinister one, seems to me sufficient excuse to warrant my trespassing at this length upon your space and upon your readers' patience; for I would like all to understand that, as those who know me know, I am not careful to conciliate, except upon just and reasonable grounds, either Mr. Mulock's friends or his opponents. I trust, Mr. Editor, that, being thoroughly acquainted with the facts and the equity of the case, you were not of those who viewed my course of conduct either "with surprise" or "with regret."

I. H. CAMERON.

Toronto, Nov. 18, 1892.

[Whatever may have been Mr. Cameron's motives, he was quite within his rights in becoming a candidate for the Vice-Chancellorship, and he is under no obligation, therefore, to offer any apology for his action; but we think that, in the above letter, he has scarcely described, with fairness, the attitude of the Vice-Chancellor when asked to rule whether the yeas and nays could be recorded if there was but one nomination. First, Mr. Cameron says, "Upon this point the Vice-Chancellor declined to rule"; again, that he (Mr. C.) "proposed that the Senate should itself affirm the point which the Vice-Chancellor had evaded"; and, again, that "it was with a great deal of surprise and disappointment that I heard Mr. Mulock decline the responsibility of allowing it." These various statements are, in themselves, conflicting; the first two are to the effect that the Vice-Chancellor declined to express an opinion, and the last that he ruled against Mr. Cameron's view, while the word "evaded" is an ungenerous and inapt expression under the circumstances. The facts are as follows: When the Vice-Chancellor was asked whether,

on his single nomination, the yeas and nays could be recorded, he replied saying that it did not appear to him becoming that he should rule on matters affecting an election at which he was a candidate, and he would, therefore, ask the Senate to decide the point. The propriety of the Vice-Chancellor's attitude seemed to commend itself to all present, no one suggesting, for an instant, that he was seeking to "evade" the proper discharge of any duty devolving upon him. Thereupon, another member asked a prominent authority on parliamentary practice for his opinion on the point, but the member so appealed to was unwilling to decide it. Another member then suggested that, no matter what the rule was, he favored the Senate meeting the views of those who, in the case of a single nomination, desired the votes to be recorded. The Vice-Chancellor at once endorsed this view, and expressed the hope that no one would object to its adoption, and the Senate appeared to be unanimously in favor of such a course. At this stage Mr. Cameron had been nominated, and had the option of withdrawing his name on the understanding that the yeas and nays would be recorded, or going to an election. He chose the latter alternative, and thus is responsible for the course adopted. Such being the facts, his action is scarcely as chivalrous as described by himself where he says, "I consented to allow my name to be proposed, but only *in extremis; i.e.*, when it appeared that the minority were in imminent danger of having their rights denied them." Nor is it just to the majority of the Senate to represent them as denying to the minority their rights.

We regret, therefore, that Mr. Cameron, who is very properly sensitive to criticism when his own actions are under consideration, should, even accidentally, fall into the error of using language which inaccurately describes the conduct of others. The editorial note in THE PRACTITIONER which brought out Mr. Cameron's reply was, as is also this comment, penned in a kindly spirit towards him. It is so easy to draw incorrect conclusions that it becomes the duty of all of us to offer and receive explanations and criticisms in a liberal, charitable spirit.—ED. C.P.]

Editor of THE CANADIAN PRACTITIONER:

SIR,—In your comments on my letter you deny that you did anything, directly or indirectly, to lower any standard in the university. In reply, I claim that the legislation initiated by you lowered the requirements for the *ad eundem gradum* and the *ad eundem statum*, and in connection with the latter you made the most extraordinary provisions for increasing the number of students in the faculty. For this purpose, your legislation gave absolute powers to the committee on the Medical Faculty, which did not, till 1891-92, contain a single medical member, to admit any student to any examination in medicine whether he had, or had not, passed the previous examinations in any university or school of medicine. School of medicine, forsooth! Does it not lower a university standard to recognize the examination of a school of medicine, or even hint at recognizing such? Your legislation increased the number of subjects in which a student could be "starred." All these changes in the curriculum, through your efforts, received the sanction of the Senate, and all were brought about for the purpose of increasing the number of students in the faculty. As part of this policy, you assisted in every way the efforts of those examiners who voted to set aside the standards, and you blocked all reform in the Senate on the points which served as an excuse for the violations of the standard. How much, therefore, it is beside the mark for you to maintain that I should have informed the Senate of these things, I leave your readers to infer. I propose to deal more fully with these matters in the near future. In regard to your insinuation that I canvassed for votes for myself, allow me to state explicitly that I have never asked for a vote for myself. I promised my support to Drs. Cameron, Reeve, and Mullin before I became a candidate myself, and when I became a candidate that fact did not free me from my promise, which I strove to fulfil to the best of my ability. A *tu quoque* is in place when there is some similarity between the delinquencies charged; but in this case there is no comparison possible between what I did and the personal "vote-begging," as it is called. I never made any secret of my canvass for my three colleagues, and I, consequently, may be par-

doned for feeling somewhat amused at your references to "strange rumors" from the west.

For many of your personal references which, no doubt, split the ears of groundlings, I feel the same charity that the Englishman felt for the abusive language of his somewhat ill-tempered wife: "It don't hurt I, and it pleases she."

A. B. MACALLUM.

[The energy of various professors in carping criticism on the views and actions of others might, in the interest of the university, be better expended in the discharge of their duties as paid public servants.—ED. C.P.]

Book Reviews.

The Electro-Therapeutics of Gynecology. By Augustin H. Goelet, M.D., Fellow of the New York Academy of Medicine and of the New York Obstetrical Society; Vice-President of the American Electro-Therapeutic Association; Member of the Societé Francaise d'Electro-therépie; Editor of the *Archives of Gynæcology, Obstetrics, and Pediatrics.* With illustrations; two volumes, 397 pages, paper covers; price, 25 cents each. Detroit: George S. Davis.

This work is in the series for 1892 of the Physicians' Leisure Library. The author aims to furnish a practical guide to the modernized application of electricity to gynecology, and this purpose is most admirably fulfilled. The first volume is devoted to electro-physics and electro-physiology, while the second deals with electro-therapeutics. In describing apparatus, the author wisely confines himself to material with which he is personally acquainted, and of which he knows the true value; and if instruments of his own design are frequently figured, it is because they have stood the test of practice. With regard to faradic batteries, the length and size of the wire constituting the coils is now recognized as the matter of the greatest importance, and a very useful table and directions will be found in the first part whereby any one may readily compute the length of wire in a coil, instead of having to take the manufacturer's word for it. The technique of the practical applications is so carefully and fully detailed as to leave no possible excuse for blunders. The illustrations throughout are of great assistance in further elucidating the text, and altogether the work is one which may be most conscientiously recommended to all who are interested in the position of electricity with regard to the treatment of diseases of women; and, in fact, should be in the hands of all general practitioners as well as gynecologists.

Diseases of the Nervous System. By J. A. Ormerod, M.D. Oxon., F.R.C.P. Lond., Medical Registrar and Demonstrator of Morbid Anatomy at St. Bartholomew's Hospital, etc. Pp. 343, and 66 illustrations. Philadelphia: P. Blakiston, Son & Co., 1892.

The author in his very short preface outlines correctly the scope of his little work. It is meant for beginners, whether they be graduates or not; not as a substitute for more elaborate treatises, but "as an introduction to the work, and outline map of territory to be acquired." It is a book that every beginner should read, and should be in the hands of every final student. The anatomical and physiological introduction is brief, clear, and thorough. The chapters on morbid anatomy of the nervous system, on certain general symptoms and methods of investigation, especially electrical methods, are calculated to rob the subject of half its terrors to the explorer of this medical *terra incognita.* The maps of motor points are well engraved, and the chapter on organic spinal, and cerebral lesions concise. The book is very readably written, and from the publisher's standpoint excellently gotten up.

Medical Electricity: A Practical Handbook for Students and Practitioners. By W. E. Steavenson, M.D., late in charge of the Electrical Department in St. Bartholomew's Hospital: and H. Lewis Jones, M.A., M.D., Member of the Royal College of Physicians; Medical Officer in charge of the Electrical Department in St. Bartholomew's Hospital. With illustrations; 446 pages, cloth. London: H. K. Lewis, 136 Gower street.

In reading this work, one cannot help deploring with Dr. Jones that Dr. Steavenson was not spared to complete his original plan; for while the most has evidently been made of the material left, yet much of the manuscript was of so fragmentary a nature that a great deal of long and valuable experience has been lost. Hence, it is not to be wondered at tha

there is a sense of incompleteness in the therapeutic portion of the work rather disappointing to those who have derived such pleasure and profit from the articles which have appeared from time to time from the pen of Dr. Steavenson. Some of the apparatus depicted would be considered rather antiquated in this country, but most of the illustrations are admirable. While the work may represent the present status of medical electricity in England, it must be borne in mind that the results achieved on this side of the water are considerably in advance. In spite of all these shortcomings, this handsome and capitally arranged volume is a decided acquisition to the literature of the subject — the theoretical, physiological, and diagnostic portions being especially valuable —and a careful perusal cannot fail to prove instructive.

The Principles of Theoretical Chemistry. By Ira Remsem, Professor of Chemistry in the Johns Hopkins University. Fourth edition. Philadelphia: Lea Brothers & Co., 1892.

This edition is, in its essential points, the same as those previously issued—a brief treatise on the facts and speculations which have to deal especially with the problem of the constitution of chemical compounds. Some changes and additions, called for by the recent developments of the science, have been made, the most important of which is a chapter on solutions, in which recent methods for the determination of atomic weights are discussed. The student will find the subject discussed clearly, and in a most concise manner, in this book.

Therapeutic Notes.

HOW TO POULTICE THE EAR.—Poulticing an ear may seem to be a simple operation, but there is, nevertheless, a right and a wrong way of doing it, and it appears that the wrong way is the one usually adopted. At least, so says Dr. Alfred H. Buck, of New York, in an article on aural therapeutics in the March number of the new *International Medical Magazine*. Dr. Buck says that while heat is one of the best remedies in painful inflammations of the middle ear, and the poultice is one of the best methods of applying heat, as usually put on the poultice has little effect. What should be done, he says, is first to fill the external auditory canal with lukewarm water, the head resting on the unaffected side upon the pillow. Then a large flaxseed poultice is applied over the ear, as hot as it can be borne. The column of water is thus kept warm, and acts as a conductor of heat between the poultice and the inflamed surface.—*Med. & Surg. Reporter.*

RHUS RADICANS IN THE TREATMENT OF NOCTURNAL INCONTINENCE OF URINE IN CHILDREN.—The *Gazette Médicale de Paris* gives the following formula for a tincture of *Rhus radicans*, to be used in the treatment of nocturnal incontinence of urine in children: *Rhus radicans* (dry leaves), one part; alcohol (21°, Corlieu), five parts. Macerate for fifteen days. To children under six years of age, five drops of this tincture may be given night and morning. For children over six, as many as forty drops may be administered. An effect is soon produced. If at the end of three weeks there is no perceptible change, it is useless to continue using the tincture. When a cure is brought about, it is best to continue the administration of the drug from time to time.—*N. Y. Med. Jour.*

THE TREATMENT OF NOCTURNAL INCONTINENCE OF URINE IN CHILDREN.—Dr. Van Tienhoven. (*Allg. Wiener Med. Zeitung.*) This author believes the exciting cause of nocturnal enuresis to be the incomplete closure of the prostatic urethra during the general muscular relaxation of sleep. The urine collecting in the bladder soon finds its way into the urethral pouch, and gives rise, by its presence, to reflex detrusor spasm.

To overcome this he advises elevation of the pelvis during sleep by means of a wooden frame, which raises the body to an angle of 45 degrees.

In this manner, he affirms, the urine is prevented from entering the posterior segment of the urethra.—*Journal of Cutaneous and Genito-Urinary Diseases.*

HABITUAL ABORTION.—Dr. Turrazo has obtained excellent results in the treatment of frequent and habitual abortion by means of assafœtida. As soon as pregnancy is diagnosed, he prescribes pills of assafœtida containing on

and one-half grain each; beginning with two pills a day, and gradually increasing to ten. After maintaining the administration of this amount for some time, the number of pills is very gradually decreased, but the remedy is not wholly discontinued until the normal term is reached.—*Med. Review.*

BLACK EYE.—There is nothing to compare with a tincture or a strong infusion of capsicum annuum, mixed with an equal bulk of mucilage or gum arabic, and with the addition of a few drops of glycerine. This should be painted over all the bruised surface with a camel's hair pencil, and allowed to dry on, a second or third coating being applied as soon as the first is dry. If done as soon as the injury is inflicted, the treatment will invariably prevent the blackening of the bruised tissue. The same remedy has no equal in rheumatic, sore, or stiff neck.—*Medical Times.*

ANAL FISSURE.—Allingham strongly advocates the local use of the following ointment:

℞. Hydrarg. subchlor, - - - gr. iv.
Pulv. opii,
Ext. belladonnæ - - - aa gr. ij.
Ung. sambuc - - - - - - ʒ j.
M.
S. To be applied frequently.

He states that he has had many cures with this ointment alone. Another excellent ointment recommended by the same authority is:

℞. Plumb. acetatis,
Zinci oxidi - - - - aa gr. x.
Pulv. calaminæ - - - - - gr. xx.
Adipis benzoinat - - - ʒ ss.
M.

An ointment of the oxide of mercury, thirty grains to the ounce, has cured many cases. —*Med. News.*

ANTISEPTIC POWDER, IMPROVED. — Cheap but reliable substitutes for these expensive proprietary preparations, as well as for iodoform, however, are always in demand. The following formula is used largely in the hospital wards of a city institution in the treatment of chronic ulcers, suppurating sores, and generally as an iodoform substitute:

℞. Salol, powdered . . . . ʒj.
Sulphite of zinc, powdered . . ℥iss.
Benzoin, powdered . . . . ʒss.
Purified talcum . . . . . ℥ij.
Oil of fennel . . . . . M xx.
M. et. sig.

—*American Druggist.*

Miscellaneous.

RAILWAY SURGERY AT THE PAN-AMERICAN MEDICAL CONGRESS.—A section of railway surgery of the Pan-American Medical Congress has been organized, with Dr. C. W. P. Brock, of Richmond, Virginia, as executive president. A full list of officers has been provided for each of the constituent countries. At the eleventh annual meeting of the Wabash Railway Surgical Association—the first organization of the kind—Dr. C. B. Stemen, of Fort Wayne, was by unanimous resolution requested to prepare a paper on "Organized Railway Surgery," and read the same before the section on railway surgery of the Pan-American Medical Congress. At the same meeting, Dr. Hal C. Wyman, of Detroit, offered the following, which was unanimously adopted: "Resolved, that each member of this association solicit his congressman to interest himself in legislation in favor of the Pan-American Medical Congress."

The U.S. Pharmacopœia, 1890, which will be published during 1893, adopts in great measure the *metric system* of weights and measures. This will doubtless create much confusion in the minds of physicians and druggists, and lead to many misunderstandings and errors. In order to provide a guide to the proper dosage, etc., Dr. Geo. M. Gould, author of "The New Medical Dictionary," has prepared a very complete table of the official and unofficial drugs, with doses in both the *metric* and *English* systems. This table is to be published in P. Blakiston, Son & Co.'s physicians' visiting list for 1893, together with a short description of the metric system.

THE Messrs. Macmillan & Co. announce that the recently completed edition of Foster's "Text-Book of Physiology," in four parts, is to be supplemented by the issue of an appendix on "The Chemical Basis of the Animal Body," by A. Sheridan Lea, Sc.D., F.R.S. Dr. Lea is Lecturer on Physiology in the University of Cambridge, England.

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THE

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EDITOR:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England.

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TORONTO, DECEMBER 16, 1892.

Original Communications.

ABSTRACT OF ADDRESS

BY WILLIAM MULOCK, M.A., Q.C., M.P.,
(Vice-Chancellor of the University),

Delivered at the Annual Banquet of the Faculty Students of the Medical Faculty of the University of Toronto, Dec. 1, 1892.

It is with great hesitation that I venture, in the presence of so many medical gentlemen, representing, doubtless, various ideas concerning medical science, to refer to the subject from the standpoint of a non-professional observer; and if my opinions differ from those of my hearers, that circumstance should be some recommendation to them, with a profession which amongst its own members recognizes such latitude of opinion. Speaking, then, of medical science, I have been given to understand that, until a very recent period, medicine was regarded almost wholly as a curative art, with the result that the course of medical education in the old world as well as the new was limited to that aspect of the subject. Medical schools might multiply in number, but still they continued as mere imitators of an early prototype, imparting education but not aspiring to advance the science. Thus conducted, there was much in the contention that such institutions engaged simply in qualifying students to pursue an ordinary calling of life, and retaining for themselves the profits of the enterprise had no claim upon the public purse.

But, sir, the inquiring, active, and restless mind of the last few years has told the world that medical science involves more than the mere curative art, and already the search-light of medical science has revealed great truths of nature whereby, under a scientific management, various classes of disease are preventable, and the well-grounded view obtained that this branch of research has scarcely been entered upon, and the old notion of medical science having to do with the curative art only, and even that not upon the most scientific basis, has been universally abandoned before the irresistible testimony furnished by the great discoveries of Pasteur, Lister, Koch, and other great philanthropic searchers after light in the fields of scientific investigation. Sir, following on the discoveries of these great men, this university, some fifteen years ago, endeavored to incorporate scientific into the ordinary medical education, and we gave ample opportunity to the medical schools to show their practical sympathy with such policy. Suffice it to say, to-night, that the strongest opposition to such movement came from a gentleman who, speaking in this hall forty-eight hours ago, deprecated the establishment of our Medical Faculty, and advised the readoption of that policy which he had assisted to make abortive. No, Mr. Chairman, this university is a progressive, but not an aggressive, institution, and, taking only safe-holding ground, holds what it takes; and I think I voice the sentiment of the whole university when I say that the university having tried the policy in question, and having been compelled to move upward to our present position by reason of the

attitude of h'm who now asks us to retrace our steps, the Medical Faculty of Toronto University is now here to stay. But, sir, it is said that I have had the misfortune to be in advance of public opinion as to what should be the relations between the state and scientific medical education. I concur in the view that medical schools conducted on the old lines have no claims upon the public exchequer; but when it comes to dealing with preventive medicine, and also to seeking to apply to the curative art all the advantages derivable from a thorough scientific education, and to give, in fact, to those who may intend to practise medicine a thorough scientific education which in their after life will, or at least may, be productive of vast benefits to society a wholly different principle is involved; and I venture to say that if the principle has not yet received public recognition, the time has arrived when it should. Mr. Chairman, let no one suppose that I advocate a draft on the university funds for our Medical Faculty. I do not. The other demands of this growing and expanding institution require all her resources; but my contention is that the application of public money in the maintenance of the public health is not only legitimate and proper, but an imperative duty on the part of the state. And if it be that scientific and preventive medicine is reasonably calculated to attain that end, then it is entitled to at least as liberal treatment as is awarded to other efforts towards preventing disease. For example, the province, at the public expense, with general approval, maintains a bureau to prevent the outbreak of disease; as, for example, by requiring proper regard to be had to certain sanitary rules. Again, in the case of disease, it at the like expense endeavors to prevent the spread of disease. Again, it maintains quarantine regulations to prevent the introduction of disease from without. And so on, in various ways the advisability of preventing disease is recognized as a public duty. But we are told by the head of a proprietary medical school that this duty does not exist towards this Faculty of Medicine, belonging to the whole people, if it should happen that its graduates at the same time require a technical scientific training entitling them to better qualify themselves for some calling—in this case the practice of medicine. Well, sir, let this criticism be extended, and away go all existing provisions whereby, largely at the public expense, the state is educating men to-day as mining engineers, mechanical engineers, electrical engineers, civil engineers, provincial land surveyors, architects, sanitary scientists, agriculturists, and so on. But I fancy I hear the contention that the reason for objection to state aid towards medical science is that medical education is being conducted by other institutions at no expense to the state. Well, sir, we should neither discourage nor minimize the results of such voluntary efforts; but, at the same time, let us not be blind to the fact that no merely self-sustaining institution to-day can efficiently deal with preventive medicine, or furnish a scientific basis for the effective practise of the curative art.

Therefore, I would say that whilst no university money is now being expended or is intended to be expended on medical science, still the public interest demands that medical science receive due recognition at the hands of the state. And if public opinion is not yet sufficiently advanced to warrant such recognition by those in authority, it devolves upon all those who desire to make this institution worthy of our claim to be a provincial university to seek to educate public opinion in such a direction as will enable this university to play her proper part in promoting the general welfare.

INTUSSUSCEPTION AND ITS TREATMENT BY OPERATION: ILLUSTRATED BY TWO CASES.*

BY FRANCIS J. SHEPHERD, M.D., C.M.,
Professor of Anatomy and Lecturer on Operative Surgery, McGill University, Montreal; Surgeon to the Montreal General Hospital.

The treatment of this somewhat rare affection has always exercised the minds of practitioners; but of late years, owing to the enormous strides made in aseptic surgery, abdominal section has become a recognized form of treatment, and hence intussusception is now looked upon by advanced men as a purely surgical condition, quite as much so as strangulated hernia. The results of abdominal section so far have not been brilliant, owing chiefly to the delay with which the operation is undertaken, the conditions resulting from the prolonged invagination

*A paper read before the Canadian Medical Association at Ottawa, Canada, Sept. 14th, 1892.

being such as to necessitate so formidable a procedure as resection of the bowel, an operation attended with much mortality even when performed in non-gangrenous cases. Mr. Arthur Barker in 1888 collected 73 cases of intussusception which had been treated by abdominal section; 13 only of these cases recovered; in 34 the bowel was simply released and no further operative measures undertaken, yet only 12 recovered. In 133 cases recorded by Mr. F. Treves, there was a mortality of 72 per cent.; when reduction was easy, in 30 per cent.; and when difficult, in 91 per cent. The reasons for this great mortality are (1) the tender age of the patient, and (2) the late performance of the operation. Operations on infants, in whom the affection is most commonly seen, are rarely successful, the patient usually dying of shock caused by the necessarily prolonged manipulation of the bowel which is needed to reduce the invagination. Now, what should first be done when we are confronted with a case of intussusception? Should other means than operation be first employed? Certainly, it would be well first to arrest the peristaltic action of the bowels by the administration of opium, or even to give emetics. We should then try to force back the invaginated bowel (which can nearly always be felt through the anus) by means of air, hydrogen gas, or water injected per rectum, whilst the patient is under the influence of an anæsthetic. Probably air or gas is safer than water, being lighter and less liable to cause injury to the bowel. This method has been fairly successful, especially in children under one year. Should it fail, then immediate resort should be had to abdominal section. This should be in the median line, and, when the tumor is come down upon, by careful manipulation we should try to pull out the invaginated bowel, not using too much force. Even if there be no adhesions great difficulty is often experienced in reducing the intussusception, owing chiefly to the resistance offered by the ileo-cæcal valve and the cæcum. This is seen in one of the cases narrated below. When the invagination has been reduced, the bowel should be carefully examined for gangrenous spots and rents. The gangrenous areas should be excised and the rents sewed up. If we find the bowel gangrenous throughout, resection is our only resource. Resection is rarely successful, owing to its tediousness and the shock caused by the operation on an already enfeebled individual. Senn advises lateral anastomosis in cases where the bowel is not gangrenous but cannot be reduced, or where the continuity of the bowel cannot be restored by circular suturing because of the difference in size of the two ends of the resected bowel, or owing to inflammatory softening. The plan adopted by myself in Case 2 seems to me to be preferable to lateral anastomosis in cases of irreducible and non-gangrenous intestine. Should the bowel, however, prove gangrenous, Barker's operation may be proceeded with through the same incision. Some recommend that an artificial anus be established. The results of this procedure have been, however, almost uniformly unsuccessful. Mr. Arthur Barker* recommends an ingenious procedure, the feasibility of which is very attractive, and I have been waiting, ever since reading his paper, for a suitable case in which to put this method into practice. It is briefly as follows: "At the point at which the intussuscipiens receives the intussusceptum the two portions of the bowel are at once united by continuous circular sutures of fine silk, taking up the serous and muscular coats of each and carrying the sutures on to the mesentery. A longitudinal incision is then made for about two inches through all the coats of the intussuscipiens in its free margin. This gives access to the sausage-like intussusceptum. The latter is then drawn through this incision and cut across at its upper end, or if too long to be drawn out is first cut across *in situ*. A few stout ligatures are, however, passed through all the walls of the stump as the mass is gradually cut off, and are tied tightly so as to keep the serous surfaces in contact and control all bleeding vessels. The stump is now cleansed, dried, and dusted over with iodoform, and allowed to drop back through the incision into the intussuscipiens, and the longitudinal incision in the latter is closed by a continuous suture from end to end." Mr. Barker has operated in two cases, but both ended fatally, owing to the fact that the operation was undertaken too late. It appears to me that this operation has much to recommend it, being more rapid and safer than resection, and in-

* *The Lancet*, Jan. 9th, 1892.

finitely to be preferred to the formation of an artificial anus.

In the cases narrated below the conditions were not such as were suitable to the performance of Barker's operation, but I hope at some future time to test its efficacy. In my two cases one was successful; but the other, owing to the tender age of the patient and the prolonged manipulation necessary to reduce so large an invagination, succumbed.

Case 1.—Intussusception in a child aged six: abdominal section; recovery: E.A., æt. six, was seen by Dr. Finley on the afternoon of Feb. 13th, 1892. She complained of severe abdominal pain, which commenced about 8 a.m., and was attributed by the mother to over-indulgence at a Sunday-school feast attended the night before. The child had vomited several times during the day; next day a considerable amount of blood and mucus was passed per rectum. On Feb. 15th pain and vomiting continued; pulse rapid and small; temperature normal; tongue thickly coated. Now for the first time Dr. Finley discovered a small, indistinct tumor below the ribs in the left side and outside the linea semilunaris Recognizing the case as one of intussusception, and remedies proving of no avail, I was called in to decide as to the expediency of operating. At 5 p.m. on Feb. 15th the child was put under the influence of ether, and a rectal examination immediately revealed a sausage-shaped tumor. No tumor could at this time be felt in the abdomen above. The tumor could be pushed back, but it almost immediately returned. Water was forced into the rectum in large quantities, and for a time the tumor disappeared from the rectum, but reappeared in the abdomen, and after a few minutes was again seen presenting at the anus. This procedure was repeated several times, when, not wishing to lose any more time, I advised removal to hospital and immediate abdominal section. This was done, the operation being performed about 8.30 p.m. The tumor could still be easily felt through the rectum, though it did not now pass the anus. The child having been placed under chloroform, a median incision was made below the umbilicus and the abdominal cavity opened; the finger was introduced and a tumor felt, which on slight traction of the bowel immediately disappeared. The abdomen was now most carefully examined to find if any other tumor existed, as I could hardly believe that the invagination could have been relieved with so little manipulation. On examining the bowels, the descending colon was found to be deeply congested at one point, and near this a scybalous mass was felt in the bowel; it seemed like a foreign body, but could be easily moved on. The wound was closed with a few silkworm-gut sutures, and dressed with absorbent cotton. The child did perfectly well, and had a natural stool within twenty-four hours. In ten days she was discharged from the hospital, and has been in good health ever since. In this case the tumor was distinctly felt through the rectum before the abdominal incision was made, and immediately before entering the hospital the child passed considerable quantities of bloody mucus, and had experienced much pain and vomited, yet the opening of the abdomen followed by the slightest manipulation of the intestine was sufficient to reduce the invagination. It may be that the intussusception had already begun to be relieved before operation was undertaken, and that the operation merely hastened the process. Still the fact remains that after several attempts at reduction by forcing water up the rectum the tumor still could be felt and seen at the anus, and that it did not disappear until the abdomen was opened.

Case 2.—Intussusception in an infant aged seven months; operation; death: B.D., a strong and healthy infant, æt. seven months, began to suffer from severe pain, accompanied by vomiting and the discharge of bloody mucus per rectum, on May 6th, 1892. Dr. Elder was called in on Sunday, May 8th, and immediately recognized the case as one of intussusception, a dark-colored tumor presenting at the anus. I was consulted about the case, and advised immediate removal to hospital. At 6 p.m. on May 8th, I first saw the patient. At that time she was suffering considerable pain, and had extreme distension of the abdomen. Protruding from the anus was a dark-red sausage-shaped tumor, which on examination proved to be an intussusception. Abdominal section was immediately decided upon, as the employment of other methods of relief was thought to be useless, owing to the condition of the patient and the

length of time the affection had lasted. The child was placed under chloroform, and an incision three inches long was made in the median line, commencing at the umbilicus. On opening the peritoneal cavity, the distended intestines immediately protruded. So great was the distension that it was useless to try to reach the seat of the intussusception without allowing the intestines to protrude. The greatly distended small intestines which extruded themselves were covered with hot towels. Now the tumor was easily found, and it filled the true pelvis. The tumor, on examination, proved to be a greatly distended rectum, into the upper end of which some small intestine was seen to pass. With the exception of the rectum, no large bowel was to be seen. I tried to release the bowel by moderate tension, which was gradually increased, but without effect, although there were no evidences of inflammatory adhesions present. Feeling that it would be useless to employ any more force, the large bowel (rectum) was incised longitudinally and the intussusceptum exposed. The incision gave exit to a large quantity of dark grumous bloody fluid. Efforts at reduction from within were now made, and, aided by an assistant's finger in the rectum, I managed to release some of the bowel. First came a portion of the lower end of the ileum; the cæcum and appendix came next like a cork out of a bottle, and the rest of the large intestines slowly unfolded themselves. A lump still remained, however, and it was found to be another intussusception which was invaginated from below upwards. This was easily relieved, and all parts of the bowel were free. Many portions were much congested, but there were no evidences of inflammatory adhesions. The incision in the rectum was now rapidly closed with a continuous Lembert's suture of fine silk, and the abdominal wound sewed with silkworm-gut, a glass drainage tube being inserted at its lower end. The patient suffered much from shock after the operation, and only lived some three hours. In this case the large amount of the invaginated bowel, the great distension, and the amount of manipulation necessary to relieve the invagination, taken together with the tender age of the patient, were quite sufficient to cause death. Although there were no inflammatory adhesions, still the difficulties of reduction were great, and invagination could not have been relieved without incising the bowel. The obstruction to reduction was manifestly the bowel about the ileo-cæcal region. It seems to me that incision of the bowel and relief of the tension, with pushing of the invaginated bowel upwards, are better methods of treatment in non-gangrenous cases than either tubal anastomosis or the establishment of an artificial anus. If the bowel should prove gangrenous, then Mr. Barker's operation could easily be proceeded with.—*London Lancet*

Selections.

THE ULTIMATE RESULTS OF A PUBEOTOMY—A RUPTURED UTERUS—INJURY TO THE LUMBO-SACRAL PLEXUS IN LABOR—MULTIPLE ABSCESSES IN THE ABDOMINAL CAVITY.

A clinical lecture delivered at the Philadelphia Hospital, November 9th, 1892.

BY BARTON COOKE HIRST, M.D.,

Professor of Obstetrics in the University of Pennsylvania, Philadelphia.

GENTLEMEN,—This woman who enters the clinic room with her baby in her arms walks, you see, with as firm and confident a step as yours or mine. She was delivered five weeks ago by pubeotomy, after a labor that had lasted forty-eight hours without the engagement of the head in the superior strait. In less than an hour after the operation began, the child was born alive and well. It has, as you see, thriven since. The mother's convalescence was complicated by a phlegmasia that appeared on the twelfth day, but has now subsided. This, I think, was due to the long pressure by the head upon the superior strait, and the consequent compression of the blood vessels in that situation. It is not my purpose to describe at length the history, recent and remote, of the operation, or its technique. This I shall reserve for another time. Suffice it to say that the latter is easy and simple. The operation can be performed by any one who has a little experience in surgery, and has learned the principles of asepsis. Indeed, I fear that the symphysis pubis will be opened unnecessarily

many a time in the future, and while the great present interest in the operation continues I dare say we shall hear of women thus delivered who have had several children before without assistance. One of the most pleasant features of the renaissance of pubeotomy is the blow it deals craniotomy upon the living child. Up to the present time we have been obliged, at term, to offer to the parents the choice of Cæsarean section and craniotomy in cases of contracted pelvis in which forceps or version was out of the question. In my experience—a large one in such cases—Cæsarean section has been refused, without exception, when the true comparison of risks was stated. In the future, with an operation at my command safer, easier, and usually quicker than craniotomy, I shall never again, I believe, do craniotomy upon a living child. The field of Cæsarean section must also be very greatly limited by our knowledge of pubeotomy. For the relative indication, at least, it will be displaced entirely.

Our next patient, who is now brought in on a stretcher, gave me yesterday a most peculiar history. She was delivered by forceps, four weeks ago, of a dead infant, after a labor of fourteen hours. She has had a number of children before, and all of her previous labors were remarkably short and easy. A day or two after the baby's birth, she noticed water escaping from the vagina, so that she was constantly kept wet. When she got out of bed and walked about, the flow became intermittent, gushing out at frequent intervals and in large quantities. Yesterday, as she walked across the ward, there was a sudden escape of water, making quite a pool on the floor, so that one of the other patients called to the nurse that the bag of waters had ruptured. On hearing this history I thought, of course, of a vesico-vaginal fistula; but the woman assured me that the water never had the odor of urine which was passed naturally, and this statement was confirmed by the head nurse. Nevertheless, I still suspected the presence of a fistula, but on a superficial examination I failed to find it. I shall now repeat my examination before you, and by care and persistence I trust we shall discover the source of this peculiar discharge. I first made a digital examination of the vagina. I find no trace of a fistula on the anterior wall; there is, however, the cicatrix of an extensive tear in the anterior and left lateral vaginal vault, that I shall test in a moment with the sound. The cervix is not much injured; the womb is in good position, well forward, of normal size, and movable.

I now pass a sound into the bladder, and sweep its tip carefully and slowly over the posterior wall and fundus, looking for an unnatural opening. As I reach the area corresponding with the cicatrix in the vagina, I am doubly careful, and follow the point of the sound in the bladder with my finger in the vagina. I discover, however, nothing like an opening. While thus engaged I notice some clear fluid trickling out of the vulva; I smell it on my fingers, but cannot detect a urinous odor. I shall now sound the uterus. I pass the uterine sound repeatedly through a cake of soap until I am sure that it is clean. In my office I should use a 50 per cent. solution of carbolic acid in glycerin. It is a matter of conscience with me to see that this instrument is clean before I employ it, which is not often. Having curved the end quite sharply, I slowly and gently pass the sound into the cervix, and then forward into the uterine cavity. It enters two and a half inches. I notice, however, a rough surface near the internal os posteriorly that needs investigation. I withdraw the sound, cleanse it again, straighten out the tip, and passing it through the cervical canal direct it posteriorly, using no force. It passes through an opening, and glides upward to a distance of four inches from the external os. At the same time there is a gush of this clear fluid. We have solved the mystery. This woman's uterus was ruptured in her last labor. The accident escaped the notice of the attending physician. The pelvic peritoneal cavity posteriorly was quickly shut off from the region above by adhesions. An encysted peritonitis or ascites developed, and hence the discharge. This condition after labor is not unheard of, but it is extremely rare. I shall trust to time to obliterate the cavity and close the opening in the womb. A more active treatment is uncalled for, as the woman has no fever and suffers no pain.*

The next patient is also a puerpera. Her

* The woman is now well. There has been no disch for several days.

baby was born ten days ago. Ever since, she has complained of pain in the right leg, On examination there is excessive tenderness along the course of the sciatic nerve in the thigh, and in the leg down the central part of the calf, and along the outer edge of the tibia in front. When the woman attempted to step from her bed to the stretcher she suffered acutely, and found that the usefulness of the right leg was impaired. You are prepared, of course, to hear the diagnosis: Neuritis from pressure upon the lumbo-sacral plexus in labor. This is a rather rare condition. But when one studies the anatomic disposition of these nerve-trunks in the pelvis, and sees at least the possibility of injurious pressure upon them in prolonged labors; when one knows, besides, that they may be pressed upon by an exudate after labor, or may be actually involved in a septic inflammation, the only wonder is that neuritis as a consequence of parturition is not more frequently seen:

I now make a vaginal examination, directing my attention to the large pelvic nerve-trunks, and I find at the region of the greater sciatic foramen some swelling and exquisite sensitiveness. You see the woman flinch, and hear her cry out, as I merely touch this point. I have so disturbed her that I really cannot judge whether there is increased sensitiveness as I attempt to follow the course of the lumbo-sacral plexus upward, but the pain is great, I am sure.

One usually expects a history of prolonged labor or unusual presentation and position of the child in a case of this sort, but our patient tells us that her labor lasted but half an hour. Her intelligence is not great, however, and I think she is mistaken; for I find, as I measure her with a pelvimeter, a simple flat pelvis, with an external conjugate of only 17 cm. It is possible, I admit, that damage may be inflicted upon the lumbo-sacral plexus in a very rapid labor. It has followed the rapid extraction of the head in breech-presentations; but this is rare.

Time may do much, or perhaps all, to relieve this woman. But I shall seek advice as to her treatment from my colleague, Dr. Charles K. Mills, who has taken a special interest in the subject, and has reported several cases of the kind at a later period, when there was paralysis and wasting of the muscles.

The next patient on my list I cannot bring before you, for she lies in another hospital (Howard). But I thought her case so unusual and instructive that a brief report of it might interest and perhaps instruct you. She is a young girl of twenty years. She enjoyed good health until two weeks before I saw her, when, on the last day of a menstrual period, she was seized with violent vomiting and purging, with profound prostration and intense pain in the lower abdomen. After four or five days the vomiting and purging ceased, but the pain and general weakness continued. When she entered the dispensary room of the Howard hospital, she walked slowly, somewhat bent over, and taking short steps. Her appearance was very bad, and suggested a serious illness. The pulse was rapid, and the temperature over 100°. On abdominal examination, a mass was felt filling the lower abdomen from the symphysis midway to the umbilicus, and reaching laterally to the iliac bones. I suspected pregnancy, but the girl denied it; there were no mammary symptoms, no discoloration of the vaginal mucous membrane, the hymen was found intact, and the cervix was not in the least softened. This was all that could be learned from a vaginal examination, for the cervix stood out like a nipple from a dense mass of exudate in all directions. The abdomen was opened two days later. The mass was composed of agglutinated intestines and exudate. Scattered through it were four or five collections of very foul-smelling pus. The largest was not far below the umbilicus, and just beneath the omentum. The others were deeper, but I could find no connection between them and the uterine adnexa, which were involved in the general adhesions, but were not distended or otherwise diseased. The pus was evacuated, the abdominal cavity irrigated and drained. For a day or two I thought the girl would die, but she is now well on in her second week, and I think out of danger. I am at a loss to explain these abscesses, unless we accept the explanation offered by the patient herself: She was obliged in her daily work to lean constantly against the edge of a high table, and often complained of abdominal soreness in consequence. To this she attributed her illness, and it is possible that she may have so bruised the intes-

tinal walls as to have caused perhaps ulceration at spots, or at any rate such a reduction of vitality as to permit the "Durchwanderung" of pyogenic micro-organisms. There may also have been a tuberculous element in the case, but this I could not demonstrate.—*Med. News.*

DEATH UNDER ANÆSTHESIA. — Mrs. A., a widow, aged about 50, who came to Canada only three weeks before, was admitted to the Guelph General Hospital on September 6th, suffering from symptoms of acute intestinal obstruction. So far as could be learned from her history, there arose a strong suspicion that there had been partial obstruction for several months. The morning following her admission, her condition being critical, it was decided, after consultation with Dr. Howitt, to examine her under anæsthesia, and to operate if found practicable.

A mixture of chloroform 1 part and ether 3 parts was dropped carefully on a towel over the face. During the administration some struggling occurred, but this soon passed off, and a fair degree of anæsthesia was induced. The respiration seemed quite satisfactory. After some minutes had been occupied in making examination externally and by the rectum, it was agreed that a small exploratory incision should be made. On attempting to make the incision it was found that she was partially conscious, and consequently a few drops more of the mixture were given. Suddenly respiration ceased. The pulse up to that moment was regular, with fair volume. On elevating the foot of the operating table a large quantity of dark grumous fluid was ejected from the stomach. Artificial respiration was persevered with for half an hour. Brandy was administered hypodermically, and all the usual efforts made to re-establish respiration. Two or three gasps at long intervals occurred, and the patient was dead.

The *post mortem* examination disclosed a malignant growth in the sigmoid flexure of the colon as the cause of the obstruction, the lumen of the bowel being almost completely closed.

In reference to this case, I deeply regret that we neglected to wash out the stomach before the anæsthetic was administered. It is true there was no food in the stomach, for none had been given for six or eight hours, and only milk in small quantities for some days. Yet I am satisfied in all cases of great tympanitic distension of the abdomen it is a wise precaution to use the stomach tube, with a view to diminish pressure from below upon the diaphragm from gas and fluids in the distended stomach.

I may say that this was the first death under anæsthesia in the fifteen years since the opening of the hospital. — *Angus Mackinnon in British Medical Journal.*

HEADACHE DUE TO TRAVEL ON RAILROAD TRAINS.—Dr. A. N. Blodgett (Boston *Medical and Surgical Journal*), in discussing the subject of ocular headaches, referred to a form of headaches resulting from travel on railroad trains which, he thought, was more frequent than generally supposed. Treatment by any of the methods usually employed is generally without benefit. An explanation was once given him by Mr. Fox, the consulting engineer entrusted with the construction of the railway tunnel beneath the River Mersey at Liverpool. In the journey between Liverpool and London, Mr. Fox incidentally made the remark that he always sat with his back toward the engine. The English cars are built with transverse compartments, so that the passenger is obliged to sit on a fixed seat, and therefore half the persons in a compartment are forced to sit with the back toward the engine. Mr. Fox stated that he always took that position from the fact that his eyes were thereby rendered much more comfortable during the journey. He thought that was due to the avoidance of the repeated and sudden strain in the accommodation which is rendered necessary if one is looking at a series of rapidly approaching objects, as when travelling in the train. The effect was like a blow upon the eye. If the traveller be looking backward, the objects would be constantly receding and the strain of accommodation was continually letting up, and caused no discomfort whatever. That seemed to be a very ingenious and logical explanation why some people suffer from headache and vertigo in railroad travelling. Since that time he has directed car-sick travellers to ride backward, and has adopted this method himself with the greatest comfort.—*Cincinnati Lancet-Clinic.*

DIET AND HEALTH.—Especial interest attaches to Dr. Salisbury's food experiments. The half-dozen sturdy fellows whom he put on a diet of baked beans and coffee exclusively all showed symptoms of locomotor ataxia, or progressive paralysis, on the tenth day, and by the sixteenth day not one of them could walk straight without support; all had chronic diarrhœa, heart palpitation, and oppressed breathing.

Four hearty, well men were put on oatmeal porridge—seasoned with butter, pepper, and salt—with a pint of coffee containing sugar and milk at each meal. Constipation, flatulence, headache, and dizziness were afflicting them all on the eighth day. In two days more these conditions had become violent; exertion produced heart palpitation, and they were full of wandering pains, with prickling in feet and hands.

These disorders grew more intense and painful—with neuralgia induced in three cases—until from the twenty-third to the twenty-fifth day, when diarrhœa set in, and the record is full of such entries as "Eyes wild, hearing impaired, head confused, memory poor, legs and feet numb, quite deaf and listless, heart palpitates and very irregular," up to the thirtieth day, when it was deemed imprudent and unsafe to carry the experiments further, and in four days more, by a meat diet and hot water, the men were restored to normal health. It may be well to observe here that in all cases men experimented on were as thoroughly and quickly cured of their abnormal conditions by those means.

Violent chronic diarrhœa, such as often prevails in armies and is known as "camp diarrhœa," was produced in three hearty, strong men by feeding them exclusively upon army biscuit in from nineteen to twenty-one days—a spell of constipation preceding—and microscopic examination proved that they were literally filled with yeast germs. Each had marked symptoms of locomotor ataxia, and partly lost the use of his lower limbs.

Bread, rice, wheaten grits, hominy, sago, tapioca, and potatoes were each fed to four or six men at a time for periods of from forty to forty-five days before serious diseases and symptoms were produced. Green peas and string beans ranked next in point of alimentary qualities. Green corn, turnips, beets, and squash quickly produced unpleasant and grave derangements, but of all vegetables asparagus was found most injurious when lived upon alone. Seven days is about as long as it would be safe to subsist upon this plant, owing to the effect upon the kidneys.

Patients have lived exclusively on beef and mutton for from three to four years. Still, if one sticks to them too long they are liable to become monotonous, and may cause "meat dyspepsia," which is dangerous. People who live exclusively on vegetable food, as the Hindoos, are enabled to do so by inherited organic tendencies. Their stomachs are of little or no use to them. The pyloric valve, being permanently paralyzed, remains open, so that vegetable matter passes directly into the proper field of its digestion.—*The Pharmaceutical Journal of Australasia.*

NOTES ON QUININE IDIOSYNCRASIES.—Considering the millions of doses of quinine taken every year, the number of cases in which it produces effects that would not be anticipated is very small. Many years ago I had under my care a patient in whom twelve grains of the sulphate of the alkaloid produced complete amaurosis, and, as the young lady happened to have a blind sister, extraordinary agitation in the family. Being of doubtful temperament, I formed at first the impression that the amaurosis was simply a coincident hysterical manifestion; but on repeating the quinine the blindness developed with the other symptoms of mild cinchonism, and disappeared *pari passu* with them. Recently, having occasion to prescribe quinine to Miss——, aged about 25, I was told by her that she had been poisoned by this substance twice in Europe, but it was agreed between us that she should take one two-grain pill; which she did about five o'clock in the afternoon. About six o'clock she was taken with a burning pain in the hands, which spread over the whole arm and finally to the surface of the body, until she was tingling and burning everywhere. About half-past six a severe pain in the stomach set in, followed shortly by vomiting. A few minutes later she fainted, remaining unconscious for five minutes. I saw her about 6.45; at that time her

whole surface was much swollen, brilliant red in color, with uticaria in wheals and long ridges. The pulse was between 50 and 60 and very feeble. Vomiting had occurred several times, and there had been one loose passage. The temperature was 102½; the day before, at the same hour, it had been 99½. There was a good deal of nervous excitement and unrest, but no delirium and no hysteria. Opium was given by injection and brandy freely by the mouth. After this vomiting recurred several times, large quantities of greenish fluid being ejected; there were also one or two alarming fainting spells. A little after seven o'clock the symptoms began to subside, and in about five hours the patient returned to her normal condition. This case is made the more interesting by the fact, which I learned after the poisoning, that a brother of the patient had had, on at least two occasions, similar symptoms provoked by quinine. Careful investigation failed, however, to get any trace of the idiosyncrasy in past generations. These rarer peculiar relations of human individuals to quinine must not be confounded with the more frequent disagreeable effects of quinine, some of which are apt to be overlooked by practitioners. The local effect of quinine upon mucous membranes is distinctly irritant, and I have met with many people in whom the cinchona alkaloids produced marked gastro-intestinal irritation; so that chronic diarrhœa or gastro-intestinal catarrh have come, in my mind, to be very important contraindications to the use of the drug. The irritating effect of quinine is also often manifested at its point of exit from the body, and the existence of cystitis or conditions allied to it should make the practitioner very careful in the adminisiration of the drug. Some time since I called to see a personal friend, a very eminent surgeon, who was convalescent from an acute inflammation of the neck of the bladder, but who was much prostrated every afternoon by a violent attack of pain entirely out of proportion to the amount of local disease apparently remaining. Finding that the patient was taking quinine freely as a tonic, and that the time of the attack of pain was coincident with that at which quinine was being most freely eliminated from his body, I suggested the disuse of the alkaloid, the result being the immediate disappearance of pain. (Horatio C. Wood, Professor of Therapeutics, University of Pennsylvania.)—*Univ. Med. May.*

UTERINE HEMORRHAGE.—Reviewing, somewhat briefly, the subject of uterine hemorrhage, one is impressed, particularly as we take into consideration our gynecological and consultation work, with the necessity of studying each case carefully, and reaching a correct diagnosis as early as possible. When once that has been accomplished, what is to be our line of treatment? Take the case of prolonged hemorrhage in girlhood; the conditions are present, such as we have referred to, a flexion of some sort, a stenosis with enlargement of the body of the uterus, the endometrium is covered with a fungoid growth, small polypi are present; there may be a true condition of endometritis fungosa: perhaps there may be present a distinct polypus. Have we any better line of treatment for these conditions than a thorough, careful dilatation of the cervical canal, complete and thorough curetting, and then, with care, packing the cavity of the uterus with sterilized gauze, dipped or not in a solution of some mercurial or iodoform gauze, thereby maintaining complete and thorough drainage? This is a method of treatment I have followed out for the past five years, enlarging upon it more and more as the degree of safety seems to have become greater, occasionally allowing the patient to wear afterward, for relief of the flexion, an intra-uterine stem pessary. I believe that in all cases where a simple uterine polypus has been removed a thorough curetting should be done, and packing with gauze carried out.—(Van de Veer, from President's Address, American Association of Obstetricians and Gynecologists, October, 1892).—*Brooklyn Medical Journal.*

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—In view of the receipt of a most cordial invitation (which was unfortunately delayed in transit, and hence did not reach the president till after adjournment), it has been decided to hold the third annual meeting of the association in Chicago on September 12th, 13th, and 14th, 1893. The Transactions for 1892 will be published in the Journal of the American Medical Association.

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

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TORONTO, DECEMBER 16, 1892.

INTRA-UTERINE AND VAGINAL INJECTIONS.

The dangers connected with the administration of intra-uterine and vaginal injections are now generally recognized; and their use in the puerperal period, as a matter of routine for prophylactic purposes, is an exceedingly rare thing at the present time. We have authentic reports of twenty-two deaths resulting from the use of the perchloride of mercury in douching the uterus or vagina. It is well to remember, however, as Tarnier tells us, that perfectly innocuous solutions (even plain water) have caused death when injected into the uterus, undoubtedly in consequence of the entrance of air into the veins.

It is the custom of many, if not the majority, of those in charge of maternity hospitals to have one vaginal douche administered before labor. Dr. Garriques, of the New York Maternity Hospital, believes that such douching removes both dirt and microbes, but that it should not be repeated. Others, including Dr. Joseph Price, of Philadelphia, think the injection, during or immediately before labor, is in the interest of the child, as it tends to prevent ophthalmia. During the past year observations were made in the Burnside Lying-in Hospital, of Toronto, with a view of learning whether there was any efficacy in such douching. For six months a vaginal douche was given in every case before labor. During the following six months no such douches were used, excepting in cases of patients who had gonorrhœa. There was no appreciable difference in the results, during the two periods, which were uniformly satisfactory. This would indicate that the single douche, early in labor, does neither good nor harm. Frequent injections, however, during labor are probably injurious, because they keep the vagina abnormally dry by repeated removals of the physiological mucus. One injection is not likely to do harm in this respect, inasmuch as a new supply will soon be secreted to replace the mucus which has been washed out.

Garriques (*Medical News*, Nov. 26) thinks, as do many others, that vaginal injections should be given after labor in certain difficult cases in which hands or instruments, or both, have been introduced into the vagina, and that a similar rule should apply to the uterus. The writer does not consider that under such circumstances, if the instruments and hands are clean, either the vaginal or intra-uterine douches are at all necessary, or even advisable. Dr. Garriques believes the practice of using prophylactic intra-uterine injections is unjustifiable on account of the dangers of carrying microbes into the uterus, and interfering with thrombi closing the uterine sinuses. Why add these dangers in an abnormal case? The writer's rule has been, for the past ten years, to use no puerperal uterine douching unless some positive and definite indications call for it.

In cases where intra-uterine injections are used, it will be well to observe the following rules:

(1) Do not use a sublimate solution, because it is dangerous; but rather one of the following: creolin, iodine, salicylic acid, or permanganate of potassium.

(2) See that all the air is driven out of the tube of your injecting apparatus before the nozzle is inserted in the vagina or uterus.

(3) Use but little force. When gravitation is the agent, the receptacle for the fluid should not be placed more than fifteen inches above the level of the patient's pelvis.

THE UNIVERSITY RESIDENCE.

The council of University College recently decided that only undergraduates in arts should, in the future, be allowed to live in the residence. It has gradually been supposed that the residence was open to all students of the university, but the members of the college

council contend that it is under the control of University College, and, as a consequence, they have power to admit or exclude whom they please. There appears to be a difference of opinion on this point, and we understand that certain legal experts declare that the authorities of University College have no such powers as they claim.

Apart from the legal aspects of the case, we regret that the college council considered it expedient at the present juncture to show that the students in arts have rights which shall be denied to other students of the university. There are plenty of empty rooms in the residence. It scarcely looks considerate to choose such a time to inform some students of the faculties of medicine and law that they are not of the elect, and therefore must depart. We had hoped that there was a general disposition to place all the students of the university on a common basis, but we have received a rather rude awakening from what appears to have been simply a pleasant dream.

The "evicted," as the unfortunates designate themselves, promptly petitioned the college council, and prayed for better terms. The following answer (*Toronto World*) was returned:

"The registrar is directed to reply that the council, after full consideration of all the circumstances, adhere to their former decision in the matter. They hold that the residence should be maintained solely in the interests of undergraduates in arts, in accordance with the original object of its establishment. They find that there are, amongst the present occupants, sixteen who are undergraduates in arts, while there are thirteen who are not, the latter number being made up of five law students, one engineering student, six university medical students, and one Trinity medical student. The council, having regard to the legitimate purposes of the residence, consider that these members (thirteen to sixteen) are so disproportionate that they do not feel justified in allowing such a state of things to continue; their plain duty being, as they conceive, to carry out without further delay the programme of improvements already begun, with a view to make the residence attractive to students of University College."

THE TRIALS OF UNPROFESSIONAL PRACTITIONERS.

Up to the present time two names have been struck off the Ontario Medical Register—Drs. Washington and Lemon, who were tried according to the statutes which give the council powers to deal with parties accused of unprofessional conduct.

According to The Ontario Medical Act, the council has power to erase from the register the name of any practitioner who has been guilty of any infamous or disgraceful conduct in a professional respect. In each case it is necessary that an application for an inquiry shall be made by four medical practitioners. A committee of the council, composed of not less than five members, shall take evidence, and report thereon to the council. On the reception of such report, the council have the power to strike the name of the offender off the register. The party whose name is erased has the privilege of making an appeal to the higher courts. Dr. Washington appealed against the decision of the council, and the appeal was heard early in December in the Divisional Court before Chief Justice Armour and Justices Falconbridge and Street. Judgment reserved.

The committee of the council which recently held inquiries in Toronto consisted of Drs. Day (chairman), Bray, and Logan. The parties charged with unprofessional conduct were Drs. Wm. Anderson and S. E. McCully. The latter, Dr. McCully, threatened a vigorous defence, and the trial created a good deal of interest. Something like thirty witnesses gave evidence against the accused. Among these were some laymen, such as Mr. John Ross Robertson, proprietor of the *Telegram*, and the Rev. D. J. Macdonell, who both expressed the opinion that some of McCully's advertisements were not fit for publication. To the surprise of all, or at least many, no evidence was offered in defence. Dr. McCully acknowledged that the charges were correct, and left his case in the hands of the council.

It is admitted on all sides that Dr. Day, the chairman of the committee, showed marked ability while acting in his capacity as a judge. The committee will meet June 11th and prepare their report on the evidence in the two

cases, which they will present at the regular meeting of the council, which will commence June 12th.

DIRECTORY FOR NURSES IN TORONTO.

This Directory for Nurses was established several years ago, but has not received that encouragement from the profession and public to which it is fairly entitled. This has not happened altogether from want of interest in the directory, nor lack of desire to support it; but, more probably, from a deficiency of co-operative work between all the parties concerned in the organization. Frequently when physicians have desired to use it, the list of nurses was found to be so small as to be practically useless. At other times, when there was a fairly good and correct list, the doctors had fallen back on their own resources. The public never had much information on the subject, and so many people who attempted to make use of it met with disappointment that it was not considered of much account by the majority of people who took the trouble to think about it at all.

The profession should give it a very cordial support. If it becomes a thorough success, it will be extremely useful to physicians, nurses, and the general public alike; and nothing then will be likely to interfere with its increasing prosperity and usefulness. We have much pleasure in publishing the following circular which has been issued to the "Doctors of Toronto":

"The Board of the Ontario Medical Library, realizing the importance of the Directory for Nurses, which has already proved so useful to many of the medical men of this city and province, desires to still further impress upon the doctors the advisability of making use of the directory, and takes this opportunity of assuring them that a determined effort is being put forth to make it a yet greater success.

"The fee for securing a nurse has been reduced from one dollar to fifty cents, and for furnishing the address of a nurse the charge is now twenty-five cents. The secretary, at the Ontario Medical Library rooms, telephone 1718, will promptly attend to messages delivered during library hours: 10 a.m. to 1 p.m., and from 2 to 6 p.m. The registrar, Dr. Gordon, 646 Spadina Ave., telephone 3495, will give all information required at any other time."

MEDICAL COLLEGE DINNERS.

The banquets given by the students of the two male medical colleges of this city were both successful in every respect. There appears to be a general consensus of opinion among those present that they were the best student-dinners ever given in Toronto. The banquet of Trinity Medical College was held Tuesday, November 29, and was largely attended by members of the faculty, students, and friends of the school. The Toronto University banquet was held December 1, and the dining hall of the Rossin House was filled by a very enthusiastic crowd. The speeches deliverer were of a superior class —as after-dinner speeches go—and were evidently highly appreciated by those present. We publish in this issue an abstract of the able address of the Vice-Chancellor, Mr. Mulock, which contains utterances that are well worthy of careful consideration.

Meeting of Medical Societies.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

The second annual meeting of the American Electro-Therapeutic Association was held in the Academy of Medicine, New York, on October 4th, 5th, and 6th. The meetings were well attended. Many valuable papers were read, and the discussions were bright and animated. The presence of several well-known physicists and electrical experts added greatly to the scientific value of the discussions, while the papers presented by them met with a very cordial reception. The idea of inviting the co-operation of those whose knowledge of the subject of electricity is of so thoroughly practical a character was a most happy one, and, following up this idea to its logical sequence, President Dr. W. J. Morton gave notice of motion to present at the next meeting an amendment to the constitution whereby the membership may be extended to include electrical experts. Another innovation which also proved a most successful feature was the introduction of two set discussions, one on "Electric Cataphoresis and its Practical Application as a Therapeutic Measure," the other on "The Relative Fœticidal Value of the Galvanic and Faradic Current in Ectopic Gestation," each of which was followed by the usual informal discussion on the respective subjects. The membership was increased by the election of one honorary and thirty ordinary fellows. A very fine display of electro-therapeutic

apparatus and literature was held in an adjoining room. The leading firms of Chicago, Detroit, and Philadelphia, as well as the most prominent New York manufacturers, being represented.

A general matter of regret was the absence through illness of the genial Dr. Robert Newman, to whom was due, in a large measure, the completeness of the details of arrangement.

Some inconvenience arose from the non-appearance of the secretary, Dr. Bigelow, of Philadelphia; but on invitation from the president, Dr. Charles R. Dickson, of Toronto, assumed the duties, and rendered what assistance he was able.

The president's address was entitled, "Electricity and Medical Art and Science." Seldom, he said, had a branch of science requiring so much intelligence been so sedulously relegated to those least gifted to pursue its study. Among the causes of this might be mentioned the difficulties of comprehending the nature of electricity; traditional adherence to drugs in the treatment of disease, and scepticism as to the value of other therapeutic measures; a natural contempt for the charlatans who were among the first to make much use of this agent in medicine; and the ignorance of the of the public who regard electricity as a great "cure-all." This discredit of so important a branch will disappear with a higher education and a consequent purging of electro-therapy from mysticism by those whose labors are undertaken in a purely scientific spirit. And now a glance at where we stand to-day. As a result of the changes which have worked themselves out in industrial and commercial relations, the electrical engineer has arisen, electricity has emerged from its thraldom, cast aside the restraint of the classroom, and become a part of practical life. The electrical engineers are beginning to invade the realms of biology, and, what is more important, medical men are beginning to turn more attention to the physics of electricity. We welcome the electrical expert. To-day an exact science, electricity, knocks at the door of medicine, an inexact science, and demands a hearing. In the onward march of measures for the relief of crippled humanity, I see electro-therapeutics struggling to the vanguard. There are positive pillars of fact on which our faith is based, the known and remarkable action of this agent upon living tissues, viz., the excitation of living protoplasm; electrolysis, without which there could be no conduction; cataphoresis, by which the fluids of the human body are moved by the flow of the current from the positive to the negative pole; and the familiar vaso-motor effects. Electrolysis chemically, and cataphoresis mechanically, alters the amount and distribution of the salts necessary to the proper nutrition and functions of the various parts of the living organism. It may be said that electro-therapeutics is chemistry against chemistry.

While some of the papers read were, naturally, of a strictly technical character, yet the majority were of much interest to the general practitioner. A synopsis is given of some of the latter.

Dr. A. D. Rockwell, of New York, dilated upon "The Use and Abuse of Electricity in Medicine," and alluded to two cases of infantile paralysis, in one of which prolonged and powerful faradization entirely extinguished the little muscular irritability which had been present. In the other case, patient and skilful treatment with the continuous current, gradually but markedly increased the power of the muscles. He exhibited a patient who had met with a railroad accident resulting in injury to the radial, median, and ulnar nerves, in whose case, for three months previously, long sittings of the faradic current had been tried. When first seen last May, the atrophy and degenerative reaction was so profound that an unfavorable prognosis was given; but as a result of intelligent treatment, he is now back at his old duties as a handler of baggage.

"New Contributions to the Electrical Treatment (both faradic and galvanic) to the Diagnosis in Gynecology," by Dr. George Apostoli. This paper was read by Dr. Hutchinson. The author thought that exploratory laparotomies and mutilating operations for ovarian disease should be prescribed till we had learned all that was possible from intra-uterine applications of electricity. He had, in 1883, shown the sedative action of the current from a fine-wire faradic coil; further experience had taught him that every hysterical pain of ovarian origin is amenable to this current; therefore, if the current fails to give relief, there is a concomitant affection of the appendages. When employing the galvanic current, the more a woman complains out of proportion to the strength employed, and the more quickly the pain ceases after treatment, the more precise is the diagnosis of hysteria. On the other hand, in every case of peri-uterine phlegmasia there is but little tolerance to the current, the post-operative reaction begins quickly, and is prolonged in proportion to the acuteness of the inflammation of the appendages. If with a current of only 20 or 30 milliampères the intolerence is excessive, it indicates that the uterus is attached with a lesion not amenable to conservative gynecology, and that galvanic treatment must be suspended. Castration will then probably be required. A long discussion followed, in which the value of the diagnostic use of electricity was admitted by all, and the importance of the paper acknowledged.

Dr. G. Betton Massey, of Philadelphia, read a paper on "A New Treatment of Prostatic Hypertrophy." When we remember that this gland is largely composed of muscular tissue, the indication for the constringent power of the electric current will be appreciated. He applied galvanism to the prostate by means of a silver prostatic catheter insulated with rubber, except at the eye. "Swelling currents" were employed from 20 to 70 m.a., but only allowed to remain at the maximum strength for a couple of seconds. Scrupulous cleanliness and great gentleness are necessary, and the sittings should not be oftener than every five days. Under these circumstances, there should be a feeling of comfort after the treatment. The primary current is also used at each sitting. A condition often associated with hypertrophy, viz., diminished contractility of the bladder, is also benefited by the same treatment. Dr. Rockwell mentioned a case he had punctured through the rectum and used a current of 50 m.a.; an orchitis ensued, but when this subsided the patient could void water quite easily.

A discussion on "Cataphoresis" was opened by Dr. Frederic Peterson (New York), and continued by Mr. A. E. Kennelly (Edison Laboratory),

giving the electrician's views. Prof. R. J. Houston (Philadelphia) gave the views of the physicist, and the medical standpoint was outlined by Dr. W. J. Morton (New York); the gynecological, by Dr. A. W. Goelet (New York); the neurological, by Dr. Peterson.

Dr. R. J. Nunn, of Savannah, Ga., presented very practically "Stabile Electrodes: Old Materials Newly Arranged." Dr. Nunn considers water the real electrode, and regards punk, clay, cotton, etc., merely as receptacles, the great desideratum being the maximum of water in the closest possible contact, most easily handled. To this end he uses a great many layers of lint, the first few being as wet as possible; these are piled on one another, and the metal connection placed on top of all. In the discussion, members advocated the claims of the white china clay, Indian meal poultice, canton flannel, sponge, cotton-covered wire gauze, various mixtures, etc. In this connection Dr. A. H. Goelet described how the clay electrode may be made wholly unobjectionable by covering the clay and plate with lintine, then put the cheese cloth over all, and back with rubber cloth. In this way it may be cleansed by washing off with soap, and can be bleached when necessary with peroxide of hydrogen. To heat it he employs a warming pan filled with hot water, on the top of which it is placed.

In "The Need of Greater Simplicity and Uniformity in Electro-Therapeutic Apparatus," Dr. W. J. Herdman, Ann Arbor, Mich., called attention to the necessity of adopting standards for all electro-therapeutic apparatus employed. Especial stress was laid upon electrodes. He suggested the appointment of small committees to consider the question. In asking for discussion, the president said the paper struck at the root of the whole matter. Dr. Hutchinson agreed as to unnecessary complication, and condemned closed-in parts, such as in cabinets, and thought a committee should be appointed to confer with the makers of instruments. Dr. Goelet endorsed the remarks of the writer. His preparation of iron as a substitute for platinum has not proved a success. It is a question whether tin is not acted on, and may not prove irritating to the uterus. Platinum is the best electrode for internal use, and the cheapest in the end. On being called on by the president, Dr. H. E. Waite (Waite & Bartlett) spoke in defence of the manufacturers. Much trouble arose from the fact that most of those who use the agent are very deficient in knowledge of the subject. With regard to coils, it is difficult to have a standard coil. He thought coils should undergo a series of tests in competent hands at some hospital. Dr. Nunn thought that if manufacturers could be induced to have interchangeable parts much would be accomplished.

Dr. C. R. Dickson, of Toronto, offered "A Contribution to the Electrical Treatment of Cystic Goitre and Hydrocele"; also a note on "Psoriasis." He described his plan of aspirating sacs, reinjecting a saline solution, and, after subjecting the parts to electrolysis, emptying the sac again, and using slight pressure. The psoriasis was an obstinate case of over ten years, and was cured by labile application through a bipolar carbon roller, which was exhibited, along with a sponge electrode with removable metal plate to aid in cleansing the electrode. A very long and most interesting discussion ensued.

Mr. John J. Carty, vice-president of the New York Electrical Society, presented "Medical Electricity from an Electrician's Standpoint," which dealt largely with the erroneous ideas conveyed by using the terms galvanism, faradism, and franklinism, which merely denote electricity under different conditions, not three kinds of electricity. There should be an agreement between electricians and physicians as to terms employed.

"Some Physiological Experiments with Magnets at the Edison Laboratory," by Dr. Frederic Peterson, of New York, and Mr. A. E. Kennelly, of the Edison Laboratory, brought out the fact that magnets of the most powerful kind at present known to science were incapable of producing any effects on the living organism.

Dr. Robert Newman's paper on "The Present Status of Electrolysis in the Treatment of Urethral Stricture, with Statistics of One Hundred Cases" (the third series), was read by Dr. Hutchinson. Later, a committee was appointed to investigate the statistics, as requested by Dr. Newman, viz., Dr. A. H. Goelet, chairman, Dr. W. J. Herdman, and Dr. W. J. Morton, these three to appoint two surgeons of prominence to act in concert with them.

The following officers were elected for 1892-93: President, Dr. Augustin H. Goelet, of New York; 1st vice-president, Dr. Wm. F. Hutchinson, of Providence, R.I.; 2nd vice-president, Dr. W. J. Herdman, of Ann Arbor, Mich.; secretary, Dr. Margaret A. Cleaves, of New York; treasurer, Dr. R. J. Nunn, of Savannah, Ga. Executive Council: Dr. W. J. Morton, of New York; Dr. G. Betton Massey, of Philadelphia, Pa.; Dr. Robert Newman, of New York; Dr. Chas. R. Dickson, of Toronto, Canada; Dr. J. H. Kellogg, of Battle Creek, Mich. The following committees on standard apparatus were also appointed to serve one year, and report at next meeting: Static Machines—Dr. J. H. Kellogg, Dr. M. A. Cleaves, Dr. G. B. Massey. Constant Current Generators and Controllers—Dr. W. J. Herdman, Dr. F. Peterson, Dr. R. Newman. Electrodes—Dr. A. D. Rockwell, Dr. R. J. Nunn, Dr. C. R. Dickson. Coils—Dr. W. J. Morton, Dr. A. H. Goelet, Dr. G. B. Massey, Dr. W. F. Hutchinson, Mr. A. E. Kennelly. Meters—Dr. W. Adams, Dr. H. E. Hayd, Dr. W. F. Robinson.

The association resolved to meet in Philadelphia on Tuesday, September 12th, 1893, following the meeting of the Pan-American Medical Congress. It was also resolved to instruct the executive council to have the transactions of the preliminary first and second annual meetings published in one volume, and a copy supplied to each member.

Votes of thanks were passed those who had extended courtesies, also to the electrical experts for their kind and valuable assistance, and many others. When all business had been finished, the retiring president reviewed what had been accomplished, predicted a bright future for the association, and introduced his successor, President-elect Dr. Augustin H. Goelet, who, on taking the chair, complimented Dr. Morton on the manner in which he had filled the duties as president, and made a brief address suitable to the occasion. After a

vote of thanks had been tendered Dr. Morton, the president declared the second annual meeting of the American Electro-Therapeutic Association adjourned.

The programme of entertainments was large and varied. The Metropolitan Telephone Exchange extended an invitation to visit their offices, which was very generally taken advantage of; their switch board is said to be the largest in the world. Tuesday evening the Electric Club gave a most charming social reunion at their elegant club house. The privileges of the club were also extended to the members of the association during the meeting. On Wednesday night, the New York resident members tendered a reception to the association and guests at the Academy; an illustrated lecture, with demonstrations on the phonograph and micro-phonograph, was given by Dr. J. Mount Bleyer, assisted by Lieut. Gianni Bettini. The use of the former of these in the treatment of ear troubles, also in preserving records of the voice for comparison in throat affections, was pointed out; while the ability of the latter to discover minute sounds inaudible to the unaided ear—for instance, the heart-beats of a patient affected with catalepsy, the pulsation of the blood in the arteries, etc.—was referred to. After the lecture, while the ladies were enjoying the "grams" in the form of musical selections by celebrated performers, the physicians were treated to diagnostic records of heart and chest sounds. An adjournment was then made to the parlors, where a most elaborate collation was served, and many witty speeches made at intervals, in response to calls of a most informal and unexpected nature from the president, Dr. Morton. A detachment of Prof. Eben's famed 71st Regiment band was stationed in an adjoining room, and rendered an excellent programme in faultless style. On Thursday afternoon the association accepted the kind invitation of Mr. Thomas Edison, and made an excursion to his laboratory near Orange, N.J. Of this trip pages might be written; the opportunity of inspecting the apparatus was a rare treat, and the visit one never to be forgotten. The festivities concluded with a lawn party at the Sanitarium of Dr. Schavoir, at Stamford, Conn., an hour's run from New York. The handsome house and commodious grounds were most favorably commented upon, the electro-therapeutic apparatus inspected, and the doctor freely complimented on his favorable surroundings. After a lunch fit for a king, carriages were provided for a trip about the neighhood, after which the guests were conveyed to the depôt.

THE CLINICAL SOCIETY OF MARYLAND.

WM. T. WATSON, M.D., SECRETARY.

Baltimore, Nov. 18th, 1892.

The 271st regular meeting was called to order by the president, Dr. William E. Mosely. T. C. Gilchrist, Theodore Cooke, jr., and James McShane were elected to membership.

Dr. S. A. Keene read a paper on

PERSONAL EXPERIENCE IN CHOLERA EPIDEMIC OF 1866.

Dr. Keene said in part: About the latter part of Sept., 1866, cholera broke out among some oyster men while dredging in the lower waters of Chesapeake Bay. The origin was assigned to a vessel hailing from Philadelphia, where the disease had been raging for two or three months. I saw my first patient one midnight. He had been vomiting and purging not more than an hour or two. I believed it to be an ordinary attack of cholera morbus, as there was not then the slightest suspicion of cholera nearer than Philadelphia. I prescribed opium and bismuth, to be followed by a purgative, and probably mustard poultices to the abdomen. Next morning, while on my way to see this patient, a messenger met me with a call in another direction. I followed the messenger, and when I reached the patient I found him affected similarly to the one I had seen the night before, and from him I learned, for the first time, that there was a disease prevailing among the oyster men dredging at James' Island from which they were "dying like sheep," and that he and Slocum, my first patient, becoming alarmed, had left their boats the evening before to go home, about thirty-five miles distance. On the way Slocum complained of feeling badly, but when they parted about ten o'clock he had not vomited. My second patient had slept well during the night, and had only been aroused early that morning by a desire to evacuate the bowels. I prescribed the same remedies as for my first patient. I hurried to my first patient, and found him dying. He died two hours later, within twelve hours from the time he and his companion separated the night before, and within nine hours from my first visit. I returned immediately to my second patient, and found that vomiting had come on during my absence, and the purging had also increased. He seemed quite prostrate and very anxious. Really, I did not know what to do. With a very limited experience, for I had only graduated eighteen months before, all alone in a country place, having just left a corpse and now standing before a most probably prospective one, you may well imagine my feelings. If I had never before appreciated the responsibilities of my profession, it is needless to say that now I realized them all. Opening my little armamentarium, and thinking all the while what I should give, I could conjure nothing nor select anything more than what I had already given him. During my perplexity the patient's old mother suggested that injections of red oak bark tea might be of service. I eagerly accepted the suggestion. The old lady knew how to make and give the injection, so I left to consult my books, promising to return soon. When I reached home there was another call, which I found to be a similar case. Within four or five days I received seventeen calls to cholera patients, all of them oyster dredgers, and coming from the affected boats. I gathered up my journals, and read them as well as I could on my routes while my boy drove. The different authors did not agree any better then than now, and I found no encouragement from my dilemma. Opium seemed to be the only thing agreed upon, but I had tried it, and seen it fail. I had already learned that time was valuable, and action must be prompt. I was constrained to believe that the tendency to exhaustion could be best met by stimulation, and for that purpose I combined chloroform, tinct. camphor, tinct. capsici, tinct. opii, and brandy, of which I gave liberally and frequently. I was pleased with the effect. It

not only stimulated the patient, but it relieved the cramps, and, I believe, had a controlling influence over the vomiting. At any rate, sixteen of the seventeen cases recovered. To revert to my second patient: When I returned I found him much relieved of the purging, and in every way better, and by the next morning he was well. I have no doubt but the red oak bark injections were of great benefit to this patient. I adopted it in all of the other cases. This little outbreak of cholera, a partial account of which is here given, did not last more than two or three weeks, and, in accord with its peculiar characteristics, the greatest virulence and mortality were in the beginning. The cases I saw were not in the places infected, but were removed to their homes many miles away. There was but one case in which I had any suspicion of contagion, and that was the wife of one of my patients, who had a very slight gastro-intestinal irritation.

Dr. W. T. Howard, jr., read a paper on

HEART HYPERTROPHY; AN ANALYSIS OF 105 CASES FROM THE AUTOPSY RECORDS OF THE JOHNS HOPKINS HOSPITAL.

Dr. A. C. Pole read a paper entitled

A CONTRIBUTION TO THE LITERATURE OF FOREIGN BODIES IN SURGERY.

On Sept. 7, 1885, G.W., who was assaulted by a crowd of roughs, presented himself to Dr. Pole, with an incised wound between the anterior and upper part of the auricle and the temporal bone. The wound was examined and cleaned, and, as a foreign body was neither seen nor suspected, the wound was stitched and dressed, and in a few days it was healed by primary union. Two years later the patient had a discharge from his ear, and behind a fungous-like growth could be felt to what seemed to be a projection of uncovered bone. He was seen by an eminent specialist, who attempted at several sittings to remove the "bone," but without avail. Examination from time to time showed that the projecting body was lowering in the auditory canal, and was becoming slightly movable. Sept. 22, 1892, the patient was anæsthetized, and Dr. Pole removed through the external auditory meatus a piece of dagger blade measuring 31/32 of an inch in length, the point having entered the posterior wall of the canal and penetrated into the mastoid cells to the depth of about ⅝ of an inch. The piece of blade had been in this position for seven years. The patient is now quite well. He has been relieved entirely of severe neuralgic pains, from which he had suffered for several years past.

Dr. J. M. T. Finney related a case of

SEVERED FINGERS REAPLIED SEVEN HOURS AFTER ACCIDENT WITH PERFECT UNION, AND RECOVERY OF MOTION AND SENSATION.

On Jan. 2, 1890, the patient, a machinist by trade, came to the Johns Hopkins Hospital about half-past 12 o'clock, giving the following history: He was a machinist by trade, and was running the engine in the absence of the regular engineer in a tin shop. He went to work about five o'clock that morning, and a little later, while going about a machine used for chopping blocks of tin, he dropped something, and while stooping down to pick it up his hand slipped under the knife and the ends of the middle and ring fingers were cut off. The middle finger was cut off just beyond the last joint. The joint was opened. The ring finger was cut off just above the root of the nail. This occurred, the man said, about half-past five o'clock. He wrapped up the stumps and went home, where his wife covered the wounds with beeswax. He arrived at the hospital at the time previously stated. I asked him where the stumps of the fingers were, and he produced them, wrapped up in a piece of newspaper. They were very cold, almost frozen. I placed them in a basin of warm water, using no antiseptic, because bichloride or carbolic acid might cause a layer of coagulation necrosis and prevent union. I scrubbed up the stumps of the fingers with a 1-2,000 warm bichloride solution; then I carefully rinsed them off in warm water. This process consumed at least half an hour. Then I took a shaving off the ends of the fingers, so as to have a perfectly fresh surface. The stumps were treated in the same manner. The bone was scraped. I sewed them on, using four stitches in each case. I then applied strips of crepe lisse, with collodion, the whole length of the fingers on each side. These held the severed portions in exact apposition. Then I used other strips around the fingers, binding them together, and then applied a palmar splint and used a large absorbent dressing. He came back in a week, and when the dressing was removed the fingers looked very well. I reapplied the dressing, and told him to report in another week. Dr Brockway saw the case on his return at the end of the second week. He took out the stitches and removed the dressing, and said that there was no doubt but that the fingers had united, and that the man seemed to have sensation at the ends of the fingers, although he thought that this sensation might have been transmitted. The man then disappeared entirely from view. He returned about a month ago with an injury to his other hand. It is difficult to say, at first sight, which hand was injured. There is a slight motion in the joint which was opened, and the sensation in the fingers is perfect.

Dr. Randolph Winslow: This case of Dr. Finney's calls to my mind a case which I had about fifteen years ago. I was called one day to see a woman who followed the occupation of upholstress. She had chopped the end of her thumb off with a hatchet perhaps half an hour before I saw her. Upon making inquiry about the missing piece, I was told that it was about the floor somewhere. I hunted it up, cleaned it, put it on with adhesive strips, and it is there to this day. It is rather an important matter that we should replace these lost parts, and in many cases we will have success. I have a number of times replaced parts which were essentially cut off, attached by a minute portion of skin, with successful union.

DR. TIFFANY, of the University of Maryland, says he knows no cause for the growth of osteo-sarcoma except traumatism. Sometimes this is so slight as to cause a doubt to arise in the mind of the surgeon as to whether or not so dire a result could follow, while in other cases the case is plainly one of cause and effect.—*Ex.*

Book Notices.

The Medical News' Visiting List for 1893. Weekly (dated, for 30 patients); Monthly (undated, for 120 patients per month); Perpetual (undated, for 30 patients weekly per year); and Perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 176 pages of blanks. The 60-Patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, pocket, pencil, rubber, and catheter-scale, etc. Seal grain leather, $1.25. Philadelphia: Lea Brothers & Co., 1892.

Leonard's Physician's Pocket Day-Book. Bound in red morocco, with flap, pocket, pencil loop, and red edges. Price, postpaid, $1.00. Published by *The Illustrated Medical Journal Co.*, Detroit, Mich.

This popular day-book is now in its fifteenth year of publication. The front part of it is occupied with dose tables, and other useful pocket memoranda. It is good for *thirteen months*, from the first of any month that it may be begun, and accommodates daily charges for fifty patients, besides having cash department and complete obstetric records. There are also columns for the diagnosis of disease, or for brief record of the treatment adopted, following each name-space. Name of patient needs to be written but three times in a month. The book is 7½ inches in length, and is 3½ inches wide. It is bound in flexible covers, *and weighs but five ounces*, so that it is easily carried in the pocket.

Book Reviews.

A Manual of Practical Medical and Physiological Chemistry. By Charles E. Pellew, E.M., Demonstrator of Physics and Chemistry in the College of Physicians and Surgeons (Medical Department of Columbia College), New York; Honorary Assistant in Chemistry at the School of Mines, Columbia College, etc. Small 8vo., 428 pages. With 28 illustrations and 8 chromo-lithographic plates. Cloth, $2.50. New York: D. Appleton & Co.

This work, as indicated in the preface, deals with chemical facts in their special application and relation to the study of medical science. It is evidently the belief of the author that too much importance has hitherto attached to the study of scientific chemistry in the medical curriculum. To this, however, we must take exception. However, it must be admitted that the work realizes in a very considerable degree the object which the compiler had before him. The book is conveniently divided into nine parts, and these again suitably subdivided into lessons, and consequently admirably adapted to meet the need of the student. As a special merit, we may mention the chapters on food stuffs, animal tissues and secretions, digestion, analysis and microscopical examination of urine. Moreover, additional interest is lent throughout from the fact that the latest clinical tests have been given. Special attention has been paid to illustration, some of the plates being particularly fine. The work is essentially a physiological chemistry, and as such we willingly commend it to the profession.

The International Magazine Pocket Visiting List, 1893. Arranged for the use of practitioners by J. C. Wilson, M.D., physician to the German Hospital, etc. Philadelphia: J. B. Lippincott Co.

This little book is neatly bound in leather, and, although it contains three hundred and sixty pages, can be easily carried in an ordinary coat pocket. The first forty pages contain, in a concise form, indexed tables and other data designed as a mnemonic aid to the practitioner. These include an obstetrical calendar, doses of drugs, relations between the metric and the English weights and measures, drugs for inhalation, formulæ of hypodermic medication, incompatibles, antidotes of the common poisons, medical thermometry, urinary tests, methods of artificial respiration, and a table showing the differential diagnosis of eruptive fevers. The second part contains the visiting list, in which space is allowed for sixty patients each week, together with their addresses, charges, and diagnoses. The last hundred pages are for the purpose of recording obstetrical engagements, vaccinations, deaths, and other memoranda. We have much pleasure in recommending this book to practitioners.

A Manual of Obstetrics. By A.F.A. King, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children, Columbia University, Washington, and the University of Vermont, etc. Fifth edition, with one hundred and fifty illustrations. Philadelphia: Lea Brothers & Co., 1892.

This is essentially a student's book, and is, confessedly, largely a compilation from larger and more elaborate text-books, especially those of Leishman, Playfair, and Lusk. It is written in a clear style, and the subject-matter is well arranged. It contains 413 papers on obstetrics proper, an additional chapter on the jurisprudence of midwifery, and an appendix containing the report on uniformity in obstetrical nomenclature adopted by the section in obstetrics of the Ninth International Medical Congress, held in Washington, 1887. The writer recommends to his class Playfair, Galabin, and Lusk; but he frequently consults King with pleasure and profit, and has no hesitation in saying that for students who prefer to commence their studies in obstetrics by reading a book of smaller calibre than those mentioned this is the best available. In writing thus, we do not wish to "damn with faint praise" a very admirable work.

Therapeutic Notes.

CLASS-ROOM NOTES. — Prof. Hare recommends aconite in cases of hypertrophy of the heart.

Prof. Keen favors the opening of a felon with the knife as soon as possible for the surgeon to do so.

Ichthyol ointment is recommended by Prof. Hare in the treatment of articular rheumatism.

Prof. Parvin recommends the emptying of the rectum and bladder before a vaginal examination.

Arsenic is recommended by Prof. Hare in cases of anæmia due to a reduction in the amount of hæmoglobin in the blood.

Prof. Keen, speaking to his class in regard to poultices, condemned the bread-and-milk poultice. He contends that there is great danger of infection from it.

Prof. Hare says that in cases where digitalis will have no effect, and is indicated, the administration of adonidine will often give good results.

Prof. Wilson says that in cases of gouty rheumatism, the anti-rheumatics yield poor results. Blistering will not be of any value for permanent relief, but may give temporary relief. He advises the administration of cod-liver oil in the earlier stages, but not in the later. In the later stages he prescribes some arsenical preparation, preferably Donovan's solution, beginning with five drops three times a day, increasing one drop every other day until the physiological effects of the drug are experienced.

In cases of *delirium tremens*, Prof. Keen gives from 1 to 2 grains of opium combined with 1 or 2 grains of chloral; this to be followed by a laxative; or if this will not move the bowels, a purge should be administered to the patient.

Prof. Wilson, in the earlier stages of influenza, prescribes antipyretics, but in the later stages he orders quinine to be given. He especially recommends turpene hydrate as an efficient and useful expectorating agent in this disease. —*College and Clinical Record.*

A PRESCRIPTION FOR PAINLESS DILATATION OF THE CERVIX UTERI.—Le Fort recommends the following prescription for this purpose:

℞.—Iodoform, ʒiii.
Powdered cocaine, gr. lxxx.
Sulphuric ether, ʒiii.

Make a solution, and wet a laminaria tent with the same. This may then be introduced into the uterine canal, and dilatation obtained without causing pain. — *L'Union Médicale — Therapeutic Gazette.*

AN OINTMENT FOR HEMORRHOIDS.—*L'Union Médicale* for September 8th, 1892, recommends the following prescription for this purpose:

℞.—Hydrochlorate of cocaine, gr. xviii.
Sulphate of morphine, gr. iv.
Sulphate of atropine, gr. iv.
Tannic acid, gr. xviii.
Vaseline, ʒi.

This ointment is to be applied to the hemorrhoids.—*Therapeutic Gazette.*

THE TREATMENT OF DYSPNŒA.—Dr. Em. Tournier classifies the causes of dyspnœa as cardio-pulmonary, cardio-hepatic, and cardio-paretic. He places the toxic dyspnœas under

the heading of cardiac dyspnœas, more particularly of arterial origin. The cardio-pulmonary dyspnœa, a dyspnœa of mechanical origin, when the phenomena of pulmonary stasis are predominant, is relieved by mild revulsives, or cupping, sinapisms as applied to the chest, rest, digitalis after a few days of a milk diet preceded by a saline or drastic purgative. Venesections, eight to ten ounces, may exceptionally be required. The digitalis should be administered in large doses, and should not be long continued; even better is the use of digitaline, in that the action is more rapid. With cardiac disease, particularly of the arterial variety with active pulmonary hyperæmia, digitalis must be avoided, and intestinal derivatives and counter-irritation over the chest be made use of. In dyspnœa of nervous origin varying modes of treatment must be employed; morphine given hypodermatically, especially in the paroxysmal dyspnœa of those suffering from aortic disease. Albuminuria is not in this instance a contra-indication to its use, but a condition demanding that it be used prudently. In the dyspnœas of toxic origin the food must be as free as possible from substances producing ptomaïnes, eliminating those already in the intestines, and preventing them from entering the blood. The first indication is best fulfilled by milk, two to three quarts daily. Keeping the kidneys in activity —diuresis—meets the second, while the third indication demands intestinal antisepsis, which diminishes the work of the liver in its destruction of ptomaïnes that are produced. Here benzo-naphthol is a powerful agent to prevent fermentation, and, at the same time, according to Huchard, slightly diuretic. If the attack is very violent, cupping, injections of morphine, inhalations of oxygen, or especially inhalations of iodide of amyl, associated or not with chloroform, may be required. Besides, not only is the dyspnœa treated, but the causative pathological condition of which this is a symptom, the arterial sclerosis, must receive methodical and persevering treatment by the iodides.—*Revue générale de Clinique et de Thérapeutique—American Journal of the Medical Sciences.*

AN OBSTETRICAL BUNDLE.—This bundle I have found very useful. I have such a bundle prepared for every obstetric case, and its cost, seventy-five cents, is more than made up by the saving of time and subsequent visits. It contains the following:

(1) One square yard of rubber cloth to be placed under the patient's hips and thighs—rubber side up of course.

(2) One square yard of cotton flannel to be placed on top of the rubber, between it and the patient's body. In this way I make sure of having the bed protected and kept clean, and an aseptic environment, and the rubber can be quickly arranged to carry off the fluids in a suitable receptacle in cases of operative procedures.

(3) A number of pieces of cheese cloth to be used as small towels, and also, when dampened with bichloride solution, as pads for the vulva.

(4) A new and clean nail brush for each case. The brushes cost three cents, and hence one can afford a new one each time.

(5) Safety pins.

(6) A narrow bobbin, consisting of three strands, for ligating the umbilical cord.

(7) An obstetrical eye bandage. This consists of a strip of cheese cloth, the two edges of which are rolled in and then doubled over a second time. While waiting for the pulsation of the cord to cease I wipe out the baby's eyes, and wrap this bandage around the head and eyes, and pin it. When this is not done, the child often rubs its dirty fingers into the eye before the attendants have had time to wash the child. Since I have adopted this plan I have never had any cases of ophthalmia neonatorum.

(8) A small wooden vial containing tablets of bichloride of mercury. I prefer these small ones to the larger size, as they are just sufficient for each dressing without splitting the tablet.—*Abbott, Post-Graduate.*

NEW USES FOR SULFONAL.—Apart from its uses in simple insomnia and some of the neuroses, sulfonal appears to have been of value in controlling such symptoms as reflex spasm and the uneasiness following traumatic injury. We note (*Medical Record*, July 2nd, 1892) that Dr. Edmund Andrews, of Chicago, speaks of sulfonal as a certain remedy in the treatment of muscular cramps of the legs appearing during the night, and especially those accompanying those of the long bones. In a case of recently fractured femur, fifteen grain-doses gave relief. In the after-treat-

ment of laparotomy, Dr. A. F. Jonas (*Omaha Clinic*, Aug., '92) says that the symptoms of sleeplessness occurring in these cases should always be relieved lest insomnia seriously complicate recovery. He usually gave sulfonal in such conditions. Dr. Althous (*Amer. Jour. Med. Science*) recommends sulfonal for the insomnia liable to occur in the treatment of post-grippal psychoses. Dr. Alexander J. C. Skene has employed sulfonal in the after-treatment of laparotomy. He writes as follows (*In. Med. Mag*, March, 1892): "Sulfonal does remarkably well as a sleep producer, and is much preferable to bromide, chloral, or any combination of such remedies. It produces the desired result in the great majority of cases that are not kept from sleep by severe pain. This remedy is worthy of note as rather new, and is certainly one that will cause sleep with no other perceptible effect, good or bad."—*Medical Summary.*

PRURITUS VULVÆ.—(*Hare's System of Practical Therapeutics*, vol. iii.)—This symptom is so distressing that we will call attention to a few matters recommended in this work for its treatment. Of course, it may be a symptom of various things, but very often its treatment will have to be empirical. Nitrate of silver is recommended, at times using even the solid stick to the affected area. Cocaine, four to ten per cent. solution, for local use during paroxysms. Carbolic acid, five to ten per cent. solution or ointment. Skene recommends carbolic acid and tincture of iodine in equal parts, used by atomization. Also iodoform, saturated solution in ether, applied with atomizer. [Our own experience has been that Goulard's solution (Sig.: plumbi subacetat. dil.), with one-third laudanum, applied with hot water, is the most serviceable of any for ordinary cases—the mucous membrane being kept apart by means of cloths saturated with this lotion. In the mean time, hot vaginal irrigation can be occasionally used of a one to four thousand sublimate solution in hot water.—J. M. Keating.]—*Internat. Med. Mag.*

THE BEST NUTRITIVE ENEMA.—Ewald, as a result of experiments, found that eggs, even though not peptonized, were to a considerable extent absorbed by the rectal mucous membrane. According to the *Mercredi Medical* for April 1st, Huber, of Zurich, has recently repeated Ewald's experiments in Professor Eichorst's clinic, and announces that the absorption of raw eggs is greatly aided by the addition of common salt. The salt is well borne, and causes, as a rule, no irritation of the bowel. He considers that eggs beaten up with salt, in the proportion of fifteen grains to each egg, are the best for nutritive enema. His method of procedure is as follows: Two or three eggs are taken, and thirty to forty-five grains of salt are added. They are slowly injected by means of a soft rubber tube, carried as high up the bowel as possible. Three such enemata are given daily. An hour before each enema the rectum is cleaned out by means of a large injection of warm water.—*N. Y. Med. Times.*

RESORCIN WITH BISMUTH, FOR ASIATIC CHOLERA.—This remedy is receiving considerable attention. Testimony is put forward in its favor by many where it has been tried with success. In mild cases it is admitted to be of some use, but the protraction is considered dangerous, as after this period it reappears. With vomiting, thirst, and diarrhœa, a one per cent. solution of tannin is recognized as an important adjunct. The prescription is:

Resorcin . .	gr. ½ to j.
Bismuth subnit. .	gr. v to x.

—*Times and Register.*

FOR small hemorrhoids and pruritus ani we have found no better remedy, as a local application, than the following:

R.—Hydrarg. chlo. mitis .	gr. xx.
Cocaine muriat .	gr. x.
Petrolati . . .	℥ i.

M. ft. ung.

Sig. Apply as directed.

—*Western M. & S. Reporter.*

BEEF JUICE.—Where it is necessary to give an invalid just the juice of beef, broil say, a half pound for just a moment over a quick fire, then score it thoroughly, put it in a lemon-squeezer, and press the juice into a cup, add a grain of salt, stand the cup in hot water for a moment

until the juice is warm, and use it immediately. This is more tasty and appetizing than beef tea. —*Col. Med. Jour.*

Miscellaneous.

ASSOCIATION OF MEDICAL OFFICERS OF THE MILITIA OF CANADA.—We are glad to learn that a most encouraging beginning has been made in the formation of this association, which promises to promote, through the medical service, the general efficiency of the Canadian militia. It will interest many in this country to learn that the constitution of the association is wide and varied, and aims—very properly, we think—at an Imperial connection. It will undoubtedly find hearty sympathy and support in its laudable aspirations from the medical services in all parts of the empire. The office-bearers are an honorary president, a president, vice-presidents for each province, with executive committees, treasurer, and secretaries. With headquarters at Toronto, branches may be established in each military district of the Dominion. The objects are no less comprehensive than the constitution of the association; first, naturally, for the development of a departmental *esprit de corps*, and the discussion of medical matters concerning the militia; secondly, for the discussion of military matters generally from a medical point of view; lastly, for the reading of papers on military medicine and surgery, hygiene, organization, and equipment. The association has not come into existence without very good reasons, nor before it was wanted, for the Canadian militia medical service is still in a crude regimental form, without departmental unity, cohesion, or weight, and altogether may be said to be in a highly unsatisfactory state. We shall watch with interest the efforts of the association to effect reforms in these directions, but fear it will meet with the same kind of passive resistance and active opposition as we have faced under similar circumstances at home, for we learn it is pretty certain to encounter the shallow, self-sufficient, Junker spirit which affects to be above medical advice, or, as they say in America, thinks it "knows it all." If we can render any service or support in furthering the laudable endeavors of the association, we shall be most pleased to do so.—*British Medical Journal.*

A PAINFUL INCIDENT.—A correspondent of the Vienna *Abenblatt* is responsible for the following statement: One morning the medical superintendent of a large lunatic asylum requested an attendant to hand him a pair of scissors. Perceiving something unusual in the aspect and demeanor of his chief, the attention of one of the physicians was drawn to the circumstance, when he was both surprised and alarmed by the announcement from the lips of the superintendent that it was his intention to open the skulls of some of his patients in order to ascertain the exact condition of their cerebral development. It thus became evident that the brain which had been for so long responsible for the medical oversight of the afflicted inmates of his asylum had itself become deranged, a circumstance not unique in the history of neurological research.—*London Lancet.*

PROFESSIONAL FAILURE AND SUCCESS.—"It would appear from the statistics recently quoted by Sir John Lubbock that very few who enter the medical profession entirely fail. Out of the 1000 medical students whose after-career came under the observation of Sir James Paget, there were apparently only 36 who were unsuccessful owing to circumstances over which they had no control. The actual number of men who did not succeed was 56; but of these 10 failed through drunkenness, and the same number through ill-health or accident. Twenty of the 1000 'left the profession,' but whether they did so because they inherited wealth or married rich wives is not stated. One of the 1000 was Palmer, the celebrated murderer, who was hanged."—*From London letter to the American Lancet*, Nov., 1892.—*Med. News.*

HE FORGOT SOMETHING.—*Doctor*—I will leave you this medicine to take after each meal.

Mike—And will yez be koind enough to lave the meal, too, dochtor?—*Tid-Bits.*

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" Mastic.....1 gr. M. ft. one pill.

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